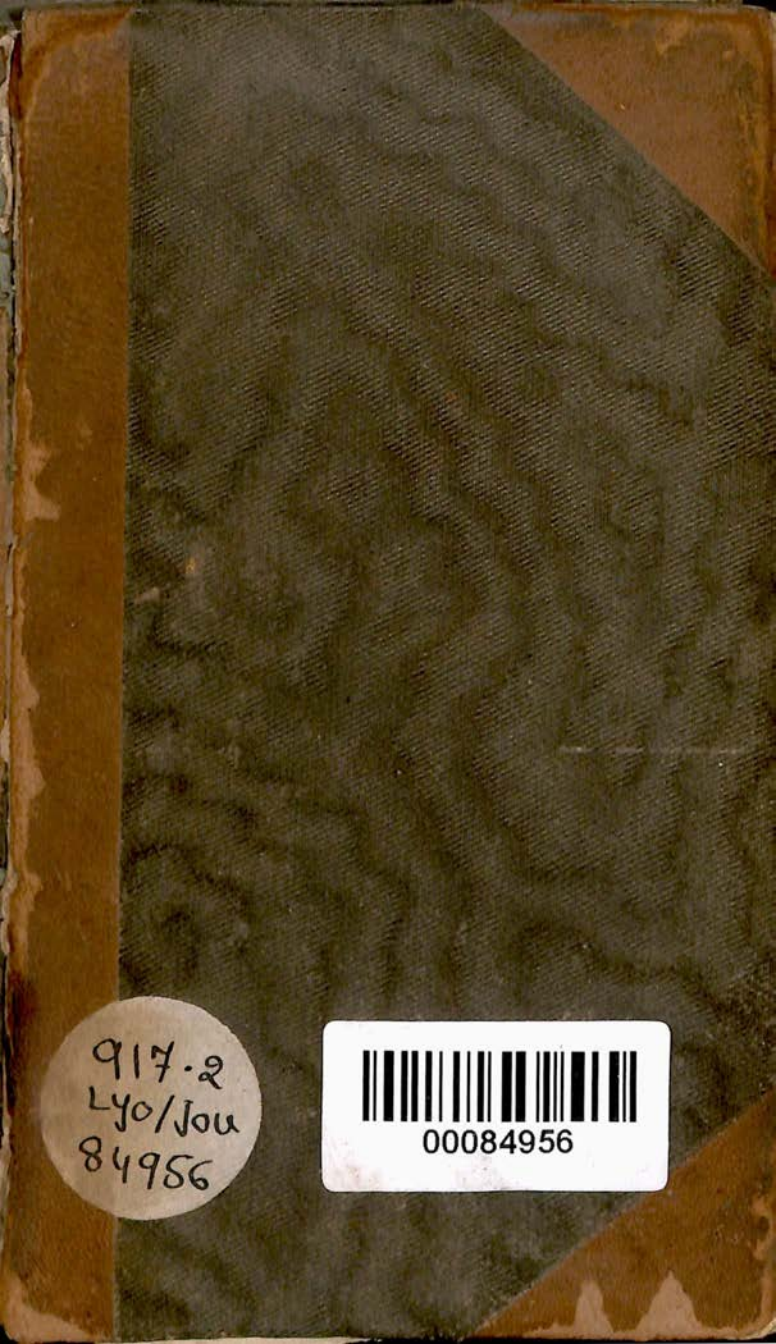
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I LEFT Bolaños on the afternoon of the 31st of August, accompanied by Messrs. Auld and Price; and riding south along the base of the mountains through a rugged but beautiful country, we passed, after rising a wooded hill to avoid the river, the pretty little village of Cheinaltatan, which,

with its plantations of sugar-cane, is situated at the foot of a picturesque cliff by the eastern bank of the river. Hence, to the music of a heavy thunder-storm, we rode through close thickets and bad paths, until at a shady little brook we found some fishermen cooling their fish, which they were conveying to Bolaños, for sale. We purchased some very nice trout and catfish, and again went on until five leagues from Bolaños, and arrived at sunset at three small Rancho huts of Guatima, standing in an open space amongst the thickets above a rapid mountain-stream, whence trout and other fish are procured.

September 1.—My friends having left me at 7 A. M., we rode forward over very uneven paths, through roads bounded by impenetrable thickets, until we arrived at the fatiguing and steep ascent of the "Cuesta Pericos," to a level of which we ascended after four hours of distressing labour to the cattle. There being abundance of fine grass amongst the tall firs and oak-trees, we turned our jaded animals loose to feed for a couple of hours

The whole of this Cuesta is thickly wooded by the broad-leaved oak for the lower half, and towards the summit by fine pines and the Encino, on whose branches I remarked abundance of parasitic plants, particularly two kinds which closely resembled our English misletoe. In the course of my day's ride I observed above thirty trees of tall firs and oaks lying split and shivered to the ground by lightning. Woodpeckers of many beautiful varieties here abounded, particularly the species with a scarlet crest, and a very large kind nearly the size of a Bantam fowl.

Again ascending for three hours, we reached a small space of table-land on the top of the mountain well covered with maize fields, and stopped at one of the very small wretched huts with which the plain called Potierillos was dotted at distant intervals. A heavy thunder-storm prevented our sleeping with the baggage under the broad-leaved oaks; we were therefore obliged to beg shelter against the coming torrents within the hut, which had no side walls and merely a roof, beneath the

centre of which there was barely room to stand upright. Some management too was necessary to clear away a space for me to lie down on my Armas de Agua *, without the risk of being burnt by the fire which occupied the centre. While this matter was arranging I heard a loud outcry, and two little half-naked boys in an instant killed a considerable sized rattle-snake, which had been turned out of its bed to make room for me. The rain came down in torrents all night; but although stowed as close as figs, we were grateful for the shelter of the hut. Besides the fire and cooking apparatus, occupying the best half, were a man, his wife, five variously sized children, and five of my own party. Our hosts were very good-natured, excessively dirty, and miserably poor In-

* Or more properly, Armas de Pelo. These are two tanned goat-skins with the hair on, which are fastened to the pummel of the saddle, one on each side, and tied by a string round the waist to protect the legs from the rain. When not used, they are rolled up and confined with a leather thong; but are always attached to their place, and pendent from the saddle, ready for immediate use.

dians: but as I was the first European they had ever spoken with, they questioned me abundantly, and in some instances with great natural good sense.

September 2.—After a night of heavy rain, we set out in a fine clear morning down a wild rugged descent, and then occasionally over rich verdant plains; but more generally amongst bold picturesque mountains thickly clothed with wood. Here in a close defile we met three poor fellows, who informed us of their having been stopped and robbed two days before, by thirteen men completely armed. These rogues had plundered them of three mules with valuable cargoes; three horses with their furniture; five ounces of gold, and about one hundred dollars; completing the business by stripping them naked and leaving them bound hand and foot on the road all night, where next morning they were found and liberated by some travellers. At sunset we reached the Hacienda of Estanzuela, situated in a valley highly cultivated with maize; and had scarcely dismounted, when a party of seventeen armed merchants ar-

rived with valuable cargoes from Guadalaxara. On the preceding day these people had met the robbers, fifteen in number, well mounted and completely armed, with a few on foot, and some who appeared to walk in ambush at a little distance. The parties, equally afraid of each other, met in so narrow a path that they actually touched; and when all had passed, the captain of the band fired a pistol at one of the merchants, who had recognized and called him by name. All the robbers then starting at full gallop were feebly pursued, yet the travellers cut off six loose horses. I was now informed that almost every man, and the captain in particular, of this formidable gang was known to the people of Guadalaxara. They always fearlessly spent their money which was gained on the road, in the city; and then as openly assembled their forces and sallied out to plunder again. The merchants of the place had frequently but vainly called on the Government to put down these daring people; yet this blessed country, with "God and Liberty" for its motto,

continued to countenance, by the fear or indifference of its authorities, the most glaring and constant enormities.

September 3.—As only three of my little party were armed, I hired five men, who had three very peaceable-looking muskets, two swords, and a spear, to accompany me; and early on the morning of the 3rd set out with my troop for San Cristobal. In two hours we passed the spot on the top of the Cuesta del Malacate where the three men had been pillaged, and where the grass was eaten quite short by the horses of the robbers. Soon after descending this very steep mountain-pass we met a boy, from whom we learnt that three armed men on horseback and two on foot had passed a short time before us; and I afterwards heard that they carried forward an account of my force, with the opinion that my cargo was of great value; probably from their having mistaken three heavy boxes of mineralogical specimens for cases of dollars. These men were afterwards seen to ford the river, and were traced to the mountain at which the robbers

were assembled. At noon we reached a pass called La Sigueta, merely remarkable for having a few huts, and some magueys on the ridge. Up a deep valley to the N. E. of this place is the Real del Mesquital, at which a small gold mine is worked by a few poor people, who having no means of procuring effective implements, merely contrive to collect enough for their support.

At three, after winding along the ledges of the precipitous mountains which hem in the Rio San Cristobal, we descended through a delightful natural shrubbery to a village of the same name on its northern bank. I put up under the portal of the Alcalde's shop, where at half past three the thermometer stood at 89°,—a heat fully equal to that of Bolaños, which this place resembles in some slight respects, although far inferior to it in beauty. I was surrounded all the afternoon by a crowd of staring people, to which I was by this time fully accustomed; and as I sadly wished to wash myself and put on a clean shirt, I was at length obliged to perform these operations in public, even

in the presence of two ladies of the Alcalde's family.—Fresh news of the robbers arrived in the evening, stating that they had plundered a large requa of mules. The Alcalde, who wished to go to Guadalaxara, now proposed to accompany me, as soon as he could on the morrow raise a force equal to mine, in order that if possible we might catch some of the rogues, to whom he had a mortal dislike. This was mingled with no small portion of dread, in consequence of their having lately robbed, stripped and bound him, together with a party with whom he travelled. Notice was also brought that a saddled horse, which had been standing all the past night and morning in the wood on the opposite side of the river, had been ridden off; and report said, that the robbers were in Escalon (a mountain-pass not far distant) awaiting a very rich cargo (no other than my poor shirts, stockings, and specimens !). My day was spent, as the preceding evening, in being stared at and questioned; and I was treated with a specimen of magisterial equity by the Alcalde, who had been

loudly boasting to me, even in the face of all these robbing adventures, of the excellence and justice of the laws of Xalisco.—A man came up to us bathed in blood, which streamed from a cut in his head four inches in length inflicted with a hatchet: yet the brute who committed this outrage was only sentenced to four days' imprisonment! To this succeeded another act of equally rigid justice. We had observed a strong light on the beach, and soon learnt from a poor ferryman that a man had burnt his little watch-house. The culprit, a drunken quarrelsome fellow, but in tolerable circumstances, was merely desired to rebuild the hut and make some arrangement with the boatman;—and with this ended our Sunday evening amusements.

September 4.—The village of San Cristobal contains in itself about 300 souls, and the people within the "Cure" in the surrounding Ranchos amount to between 2000 and 3000 *mal contados*; a convenient term, signifying "something more or less." It is situated between three rivers, none of which, however, were of any considerable depth or magni-

tude at this period, or indeed at any other, owing to the ruggedness of their beds and the frequency of falls and rocky shoals. Of these, the Rio Guichipila passes from the N.E.; and another, El Colchon, also enters the Rio Grande from the N. N.W. The Rio Grande, Santiago, and San Cristobal, (by all which appellations the one great river is known here,) passes the village, running to the west, through a Barranca, closely hemmed in by precipitous mountains, clothed to their summits with mimosas and stunted oaks. This Barranca is of considerable extent, very close and sultry, but at the same time perfectly healthy. On all the level spaces, maize is abundantly cultivated; higher up to the eastward, where the valley opens a little, the sugar-cane is the chief produce. The river runs quickly over a stony bed, is turbid and full of rapids and bars; and all navigation, except for small canoes between these frequent impediments, is entirely impossible. I believe that the greater part of the river's course hence to the Pacific is in this manner obstructed. The Rio Bolaños enters the Rio

Grande a few leagues to the westward of the pass. The waters at this time were so low, that animals passed at a ford immediately above a ridge of stones, crossing from bank to bank: but it not unfrequently happens, that for several weeks in the rainy season they must pass by swimming; and the towns-people, who excel in this exercise, are paid highly for guiding them over. A large canoe takes travellers across the ferry for a very trifling sum.

From what I have said of the Rio Grande, its inutility for commercial purposes must be apparent; more particularly when it is known, that instead of passing close to the city of Guadalaxara, as appears by the maps, it does not approach that place within six leagues: and at that distance its current, which had been even and uninterrupted from leaving the lake Chapala, changes to the broken obstructed stream in the Barranca of San Cristobal. To the eastward indeed, where it passes through several extensive and rich Haciendas, the river is generally deep and free from im-

pediments; yet, with the exception of the canoes at the ferries, I know of little navigation upon it. The same fish are procured as at Bolaños; and alligators are occasionally seen, but never approaching the passes.

At 5 P. M. our warlike party crossed the river; and the road lay along the depths of the Barranca close by the banks to the S.E. for about six miles, after which it rose gradually towards the foot of the Pass of Escalon. As we pushed through the close thickets by the river side, I several times perceived a very strong smell of bugs, proceeding, as the people informed me, from those called "compostela," which are sometimes found in large clusters beneath the leaves, where however I searched in vain for them. When we had ridden three or four leagues, night set in, and a portion of us slept under a shed, containing a rude weaving-machine for Serapes. As for the Alcalde, he had filed off with half our party to some huts in the wood, where he expected better accommodations. Those who remained kept me awake half

the night by their questions about our religion, opinions of the pope, confessions, purgatory, marriage of priests, and image-worship. Many people in the state of Xalisco waver greatly on these points, in consequence of the constant publication and distribution, from Guadalaxara, of many well written papers, opening the eyes of the natives to the idolatry in which they have been reared.

September 5.—At daylight I toiled up the precipitous pass of Escalon, leading my party, with my cocked gun and pistols in my belt, expecting every instant an attack from men in ambush. We however reached the summit very quietly; of my five hired men, two only daring to keep in advance with me. As for the others, they persisted in remaining in the rear, "looking for the Alcalde," who had not appeared. On issuing from the thicket, we brushed past a little cross recently erected over one of the men last murdered, and then entered on a tolerably level plain, intersected at intervals by abrupt little woody dells, in which we kept on the alert; the Alcalde not joining us

until we neared Milpillas, when our force amounted to seventeen men variously armed. Hence from a rising ground I observed on the plain eleven men on horseback; and as the robbers had quartered here for two days, it was natural to suppose these were the identical gang. Amongst my companions, who had just been threatening to eat the rogues alive, a dead silence now took place, and only five could be found to join me in cantering forward to the strangers; who, dismounting, formed themselves in a line and prepared to receive us; but we soon discovered them to be travellers like ourselves, and equally determined to resist the banditti.

When the Alcalde with his immense pistols and his companions joined us, they blamed me much for having left them, declaring that had they known we intended to be the aggressors, they would have been the first to cut the rogues to pieces. We met, in fact, with no impediment by the way; but this was owing more to good fortune than to our own valour. At about two leagues

beyond Milpillas we passed a little rocky dell, to which the descent is marked by five newly erected crosses, showing the site on which that number of Arrieros had recently been murdered while defending the cargoes in their charge. On a mound at a short distance was placed a small rude cross, to mark the burial-place of some other victim, with an inscription in charcoal humbly requesting a prayer for the good of his soul.

In all, we passed eleven of these memorials. It was but too evident, however, that I had much more to dread from some of my travelling companions, than from the acknowledged villains. I had quarrelled with the former on account of

their late shameful desertion of me, and they soon began to show their desire of revenge. As I rode a little before them, one of the principal men of the party actually drew a pistol on my servant, while several of the others cocked their guns in readiness to follow his fire. On this, the servant galloped up to me in great trepidation, entreating (in which request he was joined by the muleteers) that I would ride forward, my gallant Mexicans having very openly declared to him that they would shoot me also. Being already fully aware of my danger, I rejected this advice; and instead of attempting to escape, which would have been perfectly useless, I turned back upon these traitors, and with my arms in readiness dared any one to fire upon me. This conduct on my part was quite unexpected;—not an arm was lifted, some swords were sheathed, and an apology was made to me. Matters were thus, apparently, made up between us; but I had still ample reason to expect that some attack would be made on me when we should arrive at Guadalaxara. Whilst

proceeding in this doubtful temper, it so happened that I brought down a vulture on the wing, which fell dead at some distance before the party,—an event which caused a very evident sensation, and raised my gun high in the estimation, and perhaps the dread, of my fellow travellers.

After riding over a tolerably level and occasionally cultivated plain,—at 4 P. M. we entered Guadalaxara *, the capital of the State of Xalisco and the second city in the Mexican Republic. In the suburbs I was stopped at the Guarita, an outpost of the custom-house, where, after examining all my trunks to search for money, possession was taken of five hundred dollars, in consequence of my not bringing a pass from the neighbouring state, which rendered them contraband,—an extraordinary law, peculiar to this country; and my little property would have been lost to me for ever, but for the kind assistance of my friend Don Manuel Luna. I put up at the Meson San José,

* Eighteen leagues to the southward of San Cristobal. Temp. 3 P. M. 78°.

which was crowded with all sorts of people, who have the privilege of walking into every room, and tormenting strangers to purchase whatever they carry for sale. It was a most filthy place; and I was rejoiced when Don Manuel Luna, to whom I brought letters, and whose character and hospitality are proverbial, pressed me to remove to the house of his partner Don Catalino Gomez. There I had excellent rooms, and was perfectly my own master.

In the evening I accompanied my hosts with their wives to the theatre, with which I was very much pleased. It was neatly fitted up and ornamented, and the boxes were well filled by ladies, dressed rather in the extreme of French and English fashions; so that had it not been for the universal smoking, and the silence and good behaviour of the lower class of the audience, I might have almost fancied myself in England. It was indeed a singular thing to observe fair delicate handsome girls, attired in the richest ball-dresses, and many with plumes of ostrich feathers, smoking

cigars, which they held in their gloveless hands; and to see displayed, when they smiled through their clouds on some favoured swain, a row of teeth which would almost vie with ebony in colour. For my part, not smoking in public, I devoted all my attention to the ladies in our box, whose cigars it was my duty to light at lamps in front of us. I admired the play, which was a translation from our Roxalana; and when it was over, the audience called somewhat loudly for a dance by a favourite Spanish actress. On this a person came forward and announced that "Madama Olivarez presented herself to say, that not having brought her breeches or dancing-shoes, she hoped to be excused." "Let her take mine"—"Let her go for them" was vociferated from the pit and gallery. The man again came forward to announce that "unable to resist the wishes of so respectable an assembly, Madama Olivarez had sent for her breeches." A very merry farce succeeded the comedy; but in both pieces the prompter, who occupied a box in front of the stage, as is the custom

in all foreign theatres, spoke much louder than the performers, some of whom did not even know a word of their parts. To this succeeded the Bolero by Madama Olivarez, who really danced with much grace and spirit, in company with a very tolerable male performer. It is not the custom here for women to enter the pit, which is neatly fitted with backs to the benches, and the seats are all numbered. On returning from the play, we learnt that a party of robbers at nine in the evening, while the streets were full of people, had attacked the shop of a merchant, in order to rob it; and that a battle had taken place with knives and fire-arms, in which the assailants were beaten off.

September 6. 8 A. M. 70°, 2 P. M. 73°.—My first expedition on this morning was to the booths of the leather-cutters, or embossers, whose beautiful works are so deservedly celebrated; and I made some purchases, as specimens for England, for which by the kind interference of Don Manuel I never paid more than half the price at first demanded. In the afternoon I drove with my friend,

in one of the hackney vehicles (which are quite as good as our London ones, and drawn by two mules with a postillion,) to the "Belén," or public hospital; an immense edifice in the suburbs, built with all the solidity of Spanish architecture. Its wards and corridors were high, spacious, and well ventilated, and for a Mexican establishment amazingly clean. There were at this time only 160 patients in the hospital; and of these, above one third, women as well as men, were suffering from stabs, or wounds with stones. I learnt from the administrador, who also very obligingly showed me his books of entries, that quite as many females as men were brought in, dangerously wounded in frays amongst themselves. The sexes are of course in separate wards; and each patient has a bed-place, or stone bench, divided by walls from his neighbours. There is likewise an entire ward with a heavy grated door, which is set apart for wounded men brought in as prisoners from the nightly broils; and a distinct portion of the hospital is devoted to the lazaros, or lepers, a most wretched

set of beings, who drag on a life of constant suffering and misery without hope of relief. There were seven or eight of these poor people lying on their beds, from whence they were unable to move, yet very urgent for cigars, which we gave them.

In the extensive Campo Santo or burying-ground of the hospital, five bodies were lying for interment. Of these, three were murdered men, all stabbed in the head or neck; and I was informed that as many as fifteen victims have sometimes been brought for burial in one morning: yet no inquiry is ever made for the assassins, whose punishment if they are caught rarely exceeds a few days' imprisonment, and hitherto since the expulsion of the Spaniards has never been that of death. Four of the bodies which I now saw were to be thrown into a deep pit, in which all unowned corpses are tumbled together: the other, which was of an old woman, was to be buried in a grave, for which her friends had paid two reals, the sexton's fee. It appeared from all I could learn at this visit, that none of the hosts of pampered priests and friars,

who are so importunate in collecting money to purchase masses for the souls of the unconfessed or those who are in purgatory, ever volunteer to read the burial service over their bodies when they die *poor* and in a hospital.

In a small filthy cell, feebly lighted by a little grating in the door, lay the only mad person confined there,—a poor woman of about forty, whose keeper acknowledged that she was at all times perfectly tranquil and quiet; yet the wretched creature is doomed to drag out the remainder of her existence in this barricadoed and gloomy dungeon. She had lately a neighbour in misery,—an unhappy woman of rank, young, handsome, and, to her misfortune, rich. Her intellect being suddenly disordered, her brother (now possessing her property) confined her in such a place as I have described; but death in three years mercifully relieved her from her sufferings.

Returning from Belén we stopped for a time at the Chapel of San Gonzalo de Amarante, better known by the name of El Baylador (the dancer).

Here I was so fortunate as to find three old women praying rapidly, and at the same time very seriously dancing before the image of the saint, who is celebrated for his miraculous cures of "frios y calenturas" (colds and agues). These grave and venerable personages, who were perspiring most profusely at every pore, had selected for their figure that so well known in the country as the "Gunjolote" or turkey dance, from its resemblance in dignity and grace to the enamoured curvettings of those important birds: and ever and anon these faithful votaries murmured forth the following invocation, in a mingled tone of singing and moaning:

"*San Gonzalo de Amarante,*
Que sacas pescado del mar;
Saca me de este cuidado,
Que ya te vengo baylar.

"CHORUS.—(*moans*)—Ahhūm! ūm! ūm! ōh! ōh," &c.*

* San Gonzalo de Amarante,
Who can wile the fish out of the sea;

Which ended, they began pirouetting with renewed energy. It must be very evident that all this dancing, although it draws not down a miracle, must go far towards curing the devotee, who is probably a rheumatic nervous old woman, unaccustomed to exercise, and in consequence stiff and suffering in all her joints. Inspired by faith, the votary performs that which no other power could induce her to undertake, and dances unceasingly during six or eight hours, until every joint recovers its elasticity. The interposition or rather the individual power of the saint (for saints in Mexico in most instances take precedence of the Divinity,) is most fully established. He receives as an offering of gratitude, a wax leg, arm, or some other part of the body in miniature, which is hung with hundreds of others to an extensive frame-work on one side of the chapel, while the opposite wall is covered with small oil-coloured and detached paintings of

Relieve me from these my distresses
Which bring me thus dancing to thee.
CHORUS.—Oh! o——h! &c.

the miracles performed on those who could thus afford to testify their devotion. In front of the figurantes, a number of other women were kneeling with sick children, or praying on their own account:—but the whole of this idolatrous farce is now going out of repute, and I believe owes its slight remaining credit to a desire of opposing the Government, which has long endeavoured to put it down.

Of this saint, who was once worshiped in Mexico, and in fact all over the country, history has told us but little in his published legend. Where he was born or reared, no one appears either to know or care: it is only certain that he resided on the banks of some river called Tamaga, over which he built a bridge, and all who were unable to pay the toll-money were obliged to dance across it. The first miracle of this righteous man was worked in order to prove the force of excommunication; for having performed this ceremony over a loaf of bread, it became "negro como un carbon" (as black as a coal).

The pious liberality of the saint for his neigh-

bour was ample. He was wont to go to the river's side, and calling the fishes he supplied all the poor from those which flocked to his hands; after which the others were set at liberty. He struck a rock, and a rivulet of "very savoury wine" gushed forth: and touching another, there issued from it a stream of "crystalline water,"—which last remains to this day.

There are other wonders to be related of San Gonzalo; but I shall have said enough of him when I mention that, by forty days' fasting and flagellation he was translated, after a life of unblemished chastity, from this world into heaven.

Sept. 7.—This day was chiefly devoted to visiting churches; all so much alike, that little is to be said of them: they were generally very gaudy, and crowded with idols.

I believe the following is a list of all the religious edifices. The Catedral. N^a S^a del Pilar. La Capilla de Jesus. Mexicalcingo. San Sebastian de Analco. San José de Analco. Sanctuario de N^a S^a de Guadalupe, and La Capilla Cle-

rigal de N^{a} S^{a} de la Soledad.—All the monasteries have large churches attached to them. These are: San Francisco, San Augustin, San Juan de Dios, El Carmen, S^{to} Domingo, Merced, and San Felipe; the latter is a congregation neither of priests or friars, but partaking of the nature of both. The nunneries, which have also their churches, are Moneca, Gracia, Capuchina, Teresa, and Jesus Maria.—Besides these institutions are two religious establishments, S^{ta} Clara, and San Diego, for the education of young women, who can marry, or leave them at any time. There are also three colleges for young men: San Juan, Seminario, and Clerigal;—to these must be added, a *Compania Catedra de Doctores* of medicine, laws, and theology; with five schools for boys. Amongst the public buildings are, the National Hospital for men and women. A Casa de Moneda or mint, which is a very noble building*; a Casa Consistorial, and the Palacio Obispada, a fine edifice on

* The machinery is now out of order, and requires a thorough repair and improvement.

the right of the cathedral. The Palacio, or Government House, is a magnificent building, containing, besides the residence of the governor, the public offices and an immense prison. This edifice is situated on the eastern side of a neat square called the Plaza de Armas. The north is bounded by a side of the cathedral (of which the front is to the west) and the Casa de Congreso. West and south are "Portales de Comercio," or Piazzas, beneath which are good shops and standings.

The square has an extensive portion of its centre neatly paved, and inclosed by low walls with stone seats; once shaded by fine trees, which, having been planted by the Spaniards, were felled by the Republicans; and miserable little twigs are now growing up, planted by the same hands which hewed down their predecessors. They forgot, however, in their patriotic zeal, to destroy the palace and other magnificent buildings at the same time.

We could gain admittance to the hall of only one nunnery, that of Santa Maria de Gracia, at

which the elder sisters alone vouchsafed to show themselves. I was the first Englishman whom some of these ladies had ever seen. And Don Manuel Luna who accompanied me to visit them, answered in the affirmative to their questions as to my being a Jew, gratuitously informing them also, that I had, as is believed to be the case with Jews by many of the country-people,—a tail! which the reverend sisters appeared implicitly to credit; one of them very shrewdly inquiring whether the tails of heretics fell off on their conversion to the Catholic faith?

In the other nunneries the sisters never show themselves; and the vow of the Capuchina in particular is so strict, that when once a woman has taken the veil, she is never seen again even by her nearest relatives.

The city of Guadalaxara is built with great regularity; the streets running at right angles, well paved, and having raised pathways on each side. The houses, with the exception of those in the suburbs, are finely built; but I was most particularly

struck with the Portales de Comercio, erected on every side of three immense squares of houses, all built upon precisely the same model, and having the lower part devoted to shops and stores, while above are good family residences. The city is said to contain 80,000 souls; but I should not imagine the population to amount to above 50,000. Lamps are suspended at the corners of all the streets, but are only used in the absence of moonlight. A watch patroles the city throughout the night; but as it is generally composed of Leperos, they in many instances are more prone to abet than to interrupt robbers. The town is abundantly supplied with water from a mountain three leagues to the N. W., named Cerro del Col, as also from the stream of Mexicalcingo, which passes the suburbs to the southward, and has its waters raised by machinery. There are seven Plazas in which are fountains, and all the religious houses are supplied in the same manner.

The Paséo is a very extensive and shady drive, under double rows of fine trees by a shallow stream

on the eastern side of the town, and on feast-days it is enlivened by carriages and gay cavaliers on horseback. The little stream is in some places allowed to flow in its natural channel, and is there frequented by numbers of washerwomen; but in the most frequented part, where the streets lead to the Paséo, it is partially confined within little locks and channels, where the depth is sufficient to admit of bathing,—a luxury which the most complete publicity cannot check in either sex or age! At the northern extremity of the Paséo is a large inclosed space, prettily wooded and thickly set with shrubs, divided into neat squares and alleys, called the Alameda*; but it is now overgrown with weeds, and so sadly neglected as to be no longer the favourite lounge of the better classes of inhabitants, as in the time of the Spaniards.

In my rambles I visited an immense mass of building, erected by a Spanish bishop as a workhouse for the poor. It is now a very dirty ill-kept

* So named from the White Poplar (Alamo) with which the public walks in Old Spain are usually planted.

barrack for about five hundred soldiers, and thousands of houseless wretches who ought to find a home there, see above three-fourths of the spacious wards entirely untenanted. Here in the "Quartel" of the artillery I saw a number of cannon, some of twenty-four pound calibre, and about a dozen eighteen-pound English carronades,—all neglected, and filling with rust, although very great trouble and expense must have attended their transport from San Blas, by the only route through the difficult Barrancas of Mochitiltec.

In the suburbs I frequently entered cottages in which the people were employed in weaving Serapes (or coarse cloths) on very simple looms, and always met with great civility from the assembled workers, generally of one family. One man or woman sat carding the wool, another spinning, a third winding on the shuttle, and others weaving and singing. Some of my excursions were made in the hackney coaches already spoken of, and which, to the amount of twenty or thirty, are always to be found standing near the cathedral.

The shops of Guadalaxara are generally rich and well supplied, but of an uninviting exterior. The inns or Mesons are filthy in the extreme, and merely afford an unfurnished room to travellers, who are obliged to procure food from little cook-shops, the odour and appearance of which would turn the stomach of even such as are not over-nice. One or two tolerable coffee-shops are to be found; and ices can be obtained at any time, although not of a very good quality. The town is well supplied with fruits and vegetables, amongst which last are excellent potatoes,—the first I had hitherto met with of any description.

The market-place, which is large and dirty, is crowded by small awnings, and all the articles are exposed for sale on the ground, which is covered with squashed vegetable matter and all sorts of rubbish. Quantities of cooking women occupy one side of the square, where crowds of Indians and others are constantly assembled.

Guadalaxara at the period of my visit was in a state of feverish excitement, which gave reason

to fear some dangerous change in the public affairs. Party-spirit under various forms was carried on with extreme bitterness. The Iturbidists, Centralists, Federalists, and other factions, all indulged their respective feelings in numerous anonymous papers; hawked about in all the Portales and through the streets;—insulting pamphlets against the Governor and his public officers; others in his defence;—papers exposing the gross impositions of the friars, or upholding them in their absurd pretensions;—threats to the few remaining Spaniards and strangers of all descriptions, with strong abuse of private individuals,—were constantly to be met with; and murders and robberies were frequently committed, without any dread of punishment beyond a few days' imprisonment. This is of no consequence to the Leperos, or people of the lowest class, who still sleep on the ground as heretofore. They have nothing to do; and may either gamble all day, or sit at the prison windows and chat with their friends in the street, who flock to the bars in motley groups, and are seldom driven

away by the guard, which is composed of their own class.

It does not appear likely that affairs will long remain in this unsettled position; and it was the opinion of many of my acquaintance, that one "Grito" (a rising cry) would lead the whole city either to rebellion against the state, or to the cold-blooded murder of every Spaniard, stranger, and even native, of property. The European Spaniards settled in the country, and who individually are not blameable for the tyranny of their nation towards the Mexicans, are certainly to be pitied. Their lives are still in constant jeopardy, and the more so if they are rich,—the chance of plunder being a great inducement to patriotism with a Mexican, as well as every other mob.

The opinion of these people entertained in England being formed from gazettes, copies of laws, and proclamations, is sadly erroneous as respects the political state of the Republic; as are also our conceptions of this terrestrial paradise, drawn from the accounts of travellers or compilers, who

write in many instances of places which they have never visited. As well might a foreigner who had enjoyed a ramble through Greenwich Park, write a glowing account of the umbrageous beauties of the mining district of Cornwall, as the mere tourist from Vera Cruz, through the beautiful Xalapa and gorgeous Puebla, to Mexico, pretend to give an opinion on the northern states. We are, in fact, all in the dark about many parts of the Republic of Mexico; and it is to be lamented that some of our men of talent, instead of rambling for the twentieth time through the continent of Europe, do not cross the Atlantic and perform a tour through all the provinces of New Spain, in order to publish to their countrymen an account of the present state of a nation,—which from its position and circumstances must fill, at no very distant period, an important political station.

At present the northern provinces of Mexico are in a sad state of degradation. This is owing in a great measure to the cruelty of the Spaniards, in having denied to them the most common instruc-

tion beyond that which was necessary for continuing them in the state of barbarous idolatry which served to rivet their shackles.

Their degradation therefore must be attributed to their former masters; and Vice being the daughter of Ignorance, many of their faults may be traced to the same source; although it must be confessed that until the time of the Revolution, crimes which now pass unnoticed were severely punished. An enslaved man is certainly more prone by his situation to acquire vices, than he who is free; and it is a natural consequence, that the mental degradation of the natives of New Spain should be long felt, and only remedied by time and the blessings of that education which has hitherto been denied to them. Ambition is now the ruling passion; and all active spirits hope to arrive at those situations of importance, many of which are filled by people from the lowest and meanest mechanical vocations. Half the men who engaged in the late struggles were more inspired by a prospect of future aggrandizement, than by a pure patriotic spirit,—a

virtue which is rare even in more enlightened countries.

Now that the common enemy is expelled, it is high time that the general good should be secured; that just laws should be instituted and vigorously supported; and that those branches of commerce and industry which were so cruelly prohibited, should be protected and encouraged.

Guadalaxara *, being in itself a sovereign state, has modelled its own laws; scarcely one of which it strictly follows, although vaunting itself not a little on a penal code and trial by jury. At the same time it is not negligent in exacting a very unpopular income and property tax: another, too, is general throughout the Republic; and, considering the impoverished state of the nation, is certainly a very extraordinary one; that is, a duty of two per cent on all money introduced into the state even from a neighbouring province, although it may be the produce of, and coined in that part. There is scarcely a town or village in the northern

* Called also Xalisco or Jalisco.

states, and I may almost say throughout the Republic, in which are not to be found unfinished monuments of the Spaniards. Ruins of spacious half-built churches, hospitals, prisons, public promenades and aqueducts,—all strike the eye of the stranger, who cannot but lament that the infant Republic has no present means to finish or preserve such edifices as may at a future time be of the utmost national importance. Liberty is all that is now thought of and talked about,—and very naturally, after so many years of slavery; but in the mean while in many states the rich and the poor are alike unprotected, the injured seek in vain for redress, and the sincere patriot mourns over the necessarily tardy advancement of the glory and embellishment of his country.

CHAPTER VIII.

Departure from Guadalaxara—Village of Tonalá—Lake of Chapala—Long Contest between the Indians and Spaniards—Isle of Mescal—La Barca—Springs of Boiling Water—Zamosa—Cipiméo—Flocks of Orioles—Valladolid—Ozumatlan-mines—Tlalpuhaxua-mines—El Oro Mine—Toluca—Lerma to Mexico.

Sept. 9.—On the 9th, six very fine mules, for which with their furniture I had paid forty-five dollars each, arrived from a distance of thirty leagues, from whence I had sent to procure them; and I prepared for my outset on the morrow, having provided myself with such curious specimens of earthenware, leather, and other peculiar manufactures of the place as I could contrive to carry.

Sept. 10.—I left Guadalaxara early on the morning of the 10th, accompanied part of the way by Don Manuel Luna, whose genuine kindness and hospitality, with that of his partner Don Catalino Gomez, I shall never forget. Our road to the

eastward lay over a level plain studded with pretty Indian villages, whose situation was chiefly marked by their surrounding clusters of trees. On a slightly rising ground to the left, at about four miles from Guadalaxara, is the village of Tonalá, whose inhabitants (pure Indians) are celebrated for their manufacture of all kinds of earthenware; some of which nearly approach the Etruscan in lightness and elegance of form. Their toys, masks, grotesque figures and ornaments, are most deservedly admired. Our road was crowded by Indians on their way to market, laden with various goods piled in large light frames, suspended at the back by a broad leather band round the breast or forehead. Their dark woollen dresses, long raven hair, and quiet salutations, rendered them particularly picturesque objects as they trotted (their usual travelling pace) along the broad roadway, which towards the S. E. by E. is bounded by the mountains of Chapala. On either side the plains were cultivated in maize and corn, or left in the wildness of nature as pasturage for nume-

rous herds of fine cattle and brood mares, while large flocks of sheep are frequently to be seen in the brushwood. At two leagues to our left flowed the Rio Grande from the eastward, at the foot of a fine range of hills; and we here and there crossed small tributary streamlets, in which I observed a small species of crane, egrets, and two varieties of ducks. We arrived at length, after a ride of twelve leagues, on the highly cultivated lands of the Hacienda of Atequiza, at the Casa Grande, where a letter of introduction procured me a very kind reception from Don Pedro de Olasagarra, and his son Don Manuel, who had been educated in England. These gentlemen showed me their garden,—rich in the fruits of their country; dairy, cheese-rooms, and large granaries, and I passed a most agreeable evening in their society. The Hacienda, which has the advantage of being traversed by the Rio Grande, is now one of the richest in the immediate neighbourhood of Guadalaxara, although it had suffered severely by fire and pillage in the war with the Indians of Chapala.

Sept. 11.—Don Pedro having very obligingly furnished me with a guide, I set out early for the Lake of Chapala; sending my people and cargoes by a shorter route to Poncitlan, which is about six leagues E. S. E. of the Hacienda. Heavy rain which had fallen during the night had quite flooded the country, and made our road very unpleasant, till on passing a low mountain we saw beneath us the beautiful Lake with its great expanse of water, and two small but celebrated islands. Descending the partially cultivated side of the mountain, we arrived at the Campo de Tlachichilco, erected by the Spaniards, and situated on the northern bank at about three leagues S. E. of the Hacienda of Atequiza. It is perhaps but little known out of Mexico, that the Lake Chapala was the scene of one of the longest and bloodiest revolutionary struggles between a strong Spanish force stationed at the "Campo," and the Indians on the small isle of Mescal. In consequence of some wrongs which had been inflicted on them, these poor people fled with their families from the villages of Mescala, San Miguel, San Pedro, Chicān,

Tlachichilco, and other places, all situated along the borders of the Lake: Under the command of a much respected priest, the Cura of Xacomatlan (named Don Marcos Castellano), they maintained with wonderful bravery and perseverance a war of five years' continuance, during which they never once suffered themselves to be surprised, and underwent, most patiently, extreme hardships and privations. Opposed to them the Spaniards collected a force of a thousand men, including soldiers and seamen; and fourteen large launches with a schooner were with great labour and difficulty conveyed in frame, and with their guns, from the port of San Blas by the Barrancas of Mochitiltec. Three of the boats carried long 24-pounder guns; two had 8-pounders, and two 6-pounders, while each of the others had large swivels, and the schooner mounted six guns. Yet with all this force incessantly besieging and attacking the little island, these brave Indians held out from the year 1812,—keeping themselves constantly supplied with provisions by the activity of their small canoes, which nightly eluded the

cordon of guard-boats, and in the most extraordinary manner kept up a constant communication with the shores of the lake: nor would the offers of terms from the enemy, or their own great sufferings, induce them to yield until 1817, when all resources from the main land had failed. It was then that the remaining handful of gallant men, amounting as it is said to two hundred out of above two thousand in number, consented to surrender on the promise of life and liberty,—articles which the Spaniards kept more faithfully than had been their custom in the revolutionary war. At this time the Spanish force was commanded in chief by a Capitan de Navio, and in second by a Teniente de Navio; yet the canoes captured one launch with fifty men, by the Indians splashing water over the arms of the Spaniards during the battle; sunk another; and in various attacks with muskets and their slings killed great numbers of their assailants.

I had brought an order from Guadalaxara for a boat to carry me to the Indian Isle; and the eight men who rowed me having all been engaged in

the war, under the Spanish flag, recounted to me such anecdotes of the bravery, activity, endurance, and devotedness of these people, that I never more regretted my deficiency as a writer to embody so romantic a history in the form of a novel. One of the most daring exploits took place at a time when the island was closely invested night and day by the cordon of Spanish guard-boats; yet the canoes passed unseen between them, and a body of Indians landed and marched to the Hacienda of Atequiza. They burnt and plundered it, and carrying off a store of corn and provisions of which they were in great want, returned safely and unobserved through the same impediments to their little retreat. They frequently landed and destroyed the outposts of the Spaniards at the Campo, and by their constant surprises kept them in continual alarm. Even the women fought with as much determined bravery as the men, and were scarcely less feared by their besiegers; instances sometimes occurring in which these devoted creatures rushed on the bayonets of those who had

slain their husbands, for the wild satisfaction of killing with their daggers the soldiers who had fired the fatal shot.

Until the "Grito" (war-cry) ran through their country, the Chapala Indians had ever been esteemed the most mild and quiet of the agricultural villagers, and their countenances bespeak a peculiar placidity of temper: but a sense of wrongs called forth a latent spirit which struck terror into the disciplined troops of their oppressors, and placed their name conspicuously on the list of the liberators of their country. At the beginning of the contest, an incident occurred which is worthy of the brightest age of the Romans. Unarmed, ignorant of war, suffering from want of food and shelter, surrounded by their wives and children,—"Cruz * sent to them a proclamation, exhorting obedience to the king of Spain. The commissioner read it in a loud voice to the Indians, (who listened to him most attentively,) concluding with energy, and saying that if they did not submit, *blood would flow in abundance!* Having

* The Spanish Commander.

finished reading, he inquired of the Indians, 'How reply you to this?' when they, as if inspired by the same spirit and speaking with one voice, replied simultaneously, *Let the blood flow*!*"

The Island of Mescal is a small rocky place, little more than half a mile in length and a quarter in width, of an irregular form, and having a small narrow isthmus running from its northern end. It could be ascended with ease in any direction. The island is about four miles from Tlachichilco, and sixteen from the opposite southern shore of the lake, which extends from it S.W. by W. about thirty miles, and in the opposite quarter fifty more, hemmed in on all sides by steep ridges of moun-

* "Cruz les mandó un papelote exhortandolos a la obediencia al Rey de España. El comisionado lo leyó en voz alta, y los Indios lo escucharon atentamente; concluió con brabatas, diciendo que si no se sometean '*Correria la sangre en abundancia;*' y al terminar preguntó a los Indios ¿ Que respondeis á estó? y ellos si estuvieron insuflados por un espiritu, y hablaron por una boca, respondieron simultaneamente '*Que corra el sangre!*' "—Extracted from a recently published work on the Mexican Revolution: by Don Carlos Bustamante: Mexico.

tains, which to the east are but dimly seen in the distance.

Off Mescal is a smaller islet, of about eight or ten acres, on which the Indians also, for a time maintained themselves, until the straitness of their siege obliged them to join their companions on the larger one. I looked in vain on the little rock for traces of Indian habitations, and learnt that throughout the contest the warriors had not even huts, but sheltered themselves and their wretched families from the burning sun or overwhelming tropical rains, beneath boughs, blankets, or mats, brought from the main land. In all their misery, they sowed maize every year on one or two small ridges; but the produce, although cultivated with the greatest care, and held sacred by the famished women and children who saw it growing within their reach, did not answer an hundredth part of their necessity. Not a bush or tree was left standing, and the want of fuel was latterly as severely felt as that of food. One solitary building alone remains, to record at once the poverty

and piety of the Indian patriots. It is a very small unornamented chapel, of about twelve feet square, which was respected by the Spaniards after their hard-earned conquest, and stands as an affecting monument to the memory of those who fell, and whose graves, as I was informed, were dug round the sacred edifice.

The Spaniards on becoming masters of Mescal, erected two large fortresses, which, although strong from their situation, are never likely to be of any other use than as dépôts for convicts; to which I hear that they are about to be appropriated. Great sums have been expended on these works; but before they were completely finished, the country had changed masters. There were no guns in the principal fortress, which is now in the custody of one man; but within its walls were piled large heaps of stones, which he informed me were ammunition for the slings, which the Indians use with great dexterity.

While at Tlachichilco, which has a ruined little shrub-covered fort, a few huts, and some sheds over

the Spanish launches, now falling rapidly into decay, I shot some very handsome gray marmots, of the size of Guinea-pigs, and having very bushy tails. They live in the stone walls round the maize fields, and commit great havoc amongst the young green crops.

The lake is said to be of a pretty equal depth, six to seven fathoms; and one of the seamen of the schooner informed me that there are but two small shoals in it, and that the anchoring ground is excellent in every part. It produces the delicate "White Fish" (Pescado Blanco), the Boquinéte, Bagre, and some few other kinds. The mangroves on the banks are the resort of numerous birds of the crane and heron tribes. The beautiful white egrets abound; and ducks, grebes, shags (a small species of tern), with a variety of beach birds, can from their tameness be procured with ease.

We set out late in the afternoon through a continuous and beautiful natural shrubbery for about five miles by the side of the lake, of which we occasionally obtained bright glances through fes-

toons of delicious wild Convolvulus. Here and there I observed rude crosses by the road side, decorated with fresh chaplets and garlands of brilliant flowers, marking the death-spot in many instances of an Indian or a Spaniard; most probably the former, from the care evinced in ornamenting these frail memorials. We passed several little embowered clusters of huts, now inhabited in peace by the remaining heroes of the island.

Several Indians and their families were passing amongst the lovely lanes between the villages, and all saluted the stranger with "Adios;" their deep brown countenances bearing that almost apathetic mildness of expression, so peculiar to the Aztec race, and so completely the reverse of their character, when sanctioned by their religious leaders they are aroused by a sense of wrongs.

We ascended by narrow, difficult and closely shaded paths to the ridge of the northern range of mountains; and it was remarkable that on our descent of the other side scarcely a tree was to be seen. A dark, rainy, windy night set in upon us while on

the plains; but the guide, I know not how, found his way through clay and water, and brought me safely to Pomitlan, where I found my people comfortably lodged, and had a curd cheese for my supper.

September 12.—At seven we sallied forth over the swampy plain of San Luis, most prolific throughout its extent in a kind of deep, tenacious black mud, fatiguing to the mules, and not a little disagreeable to ourselves. In some places immense herds of cattle were straying, while here and there flourished fine crops of maize. In six leagues we reached the Rio Grande, which throughout the day had been at the foot of the mountains two miles on our left. Our animals having swam the stream, which was here 200 yards wide, clear of impediments, and about ten feet in depth, we passed in a rude canoe. The river issues from the Lake Chapala, near this place, and for a time flows to the northward. On the eastern banks, but divided from us by a narrow inlet, stands the small town of Ocotlan, with a large church towering as

usual above the wretched mud huts, by which it is surrounded.

In eight swampy leagues more we arrived at La Barca, (total distance S. E. by E. 14 leagues,) which was a village when in its best state, and now in ruins has been elevated to the rank of "Villa" (a town), a custom very general in Mexico: so that without good previous information, the traveller knows not if the *cities* and *towns* which he is about to visit consist of houses, streets, and a population of thousands; or are merely clusters of mud huts, inhabited by one or two hundred poor Indians. La Barca stands on the west bank of the Rio Grande, which flows past it to the lake: and I took up my quarters in one of two very wretched Mesons, which had the merit of being nearest to the river, although I should have been far better accommodated under a tree; the room apportioned to me being so full of bats, and smelling so powerfully of them, that it was impossible to remain in it. This town was once of considerable importance, and inhabited by

many wealthy families, whose half-ruined untenanted houses yet remain. In the eyes of a La Barca lady, however, with whom I had some conversation, the place was as gay and flourishing as ever. "It had two public balls every week, to which any one could be admitted; and occasional bull-fights, in one of the last of which three ladies had entered the Plaza de Toros, and distinguished themselves very highly." By her account, three Englishmen had also contributed to enliven La Barca during the Easter week by setting up a public gaming-table for fifteen days, thereby very materially impoverishing some of the people of the place. I am aware that, to the great disapprobation of their countrymen, a party of Anglo-Americans have travelled through the Republic as avowed gamesters; and therefore hope, for our national credit with the Mexicans, that these were the persons alluded to.

September 18.—My cattle were swam across the river, now about ninety yards wide owing to the dryness of the season, and the baggage with our-

selves passed in a large canoe over a sluggish stream, which at some seasons becomes perfectly impetuous, and rises so as to overflow the high steep banks and to reach the neighbouring houses. From La Barca, after two or three turns to the N. S.W., the river flows into the Lake Chapala, through which its course may be traced by the difference of colour in the waters until it issues forth at Ocotlan. As the morning dawned the scene became very interesting, from the brightness of the day, and the quantity of country-people passing the river with cattle, fruits, milk and other articles for the market; while in little distant nooks were to be seen small groups of bathing damsels, who here have the merit of not swimming quite so publicly as at many other places.

We had now entered the State of Mechoacan, of which Valladolid is the capital; and riding two leagues to the eastward, through cultivated lands and abundant swamps, reached the pretty Hacienda of Buena Vista, where at the house of the administrador, who was a friend of one of my ser-

vants, I had a very bad breakfast. Riding after this eight leagues from La Barca we reached the little scattered village of Ystlan, standing in a perfectly flat valley of two miles in width and three or four in length, hemmed in by low woody mountains. The plain is interesting, as being in some places covered by an efflorescence of muriate of soda, which forms a considerable article of commerce. The saline earth is collected into large vats, through which water is filtered, and then placed to evaporate in small well-cemented beds of about twelve feet by six. All this, however, interested me but little in comparison with the wells of boiling water, which to the amount of many hundreds are dispersed in a space of one mile and a half by a quarter of a mile in width, east and west along the plain, and sending up at intervals clouds of steam. In fact the whole surface of this place is nothing more than the crust of a volcano; and seven years back an earthquake opened a large rent in the plain, whence issued fountains of the purest water, and of mud also, both of a boiling heat.

In the evening I rambled amongst the springs, which are of all forms and sizes, from holes not larger than an inch, through which the water is seen and heard boiling beneath, to large spaces of several yards in diameter; some as transparent as though distilled. Others, within a foot of them, are turbid, or of boiling mud; and there is one called "El Pozo Verde," in which, although perfectly clear, the water is of a fine deep green. The springs are in some places constantly tranquil, and varying in temperature from 110° to 130°; but in far the greater number the water boils up with amazing force: and in one well, chosen at random, I cooked a piece of mutton of the size of an egg in four minutes and fifty seconds. All the fountains which have been sufficiently small to admit of it, have been choked up with stones and bushes, to prevent cattle from falling into them; yet a number of poor beasts are frequently thus destroyed. It is the custom of the country-people to kill and scald their pigs at these springs, and I saw a party of Arrieros cooking their supper very comfortably over one. The stratum

through which the water rises is chiefly a calcareous earth; but on the surface, detached pieces of limestone abound, as well as porous lava of various kinds, with fragments of obsidian: with these substances there are also large spaces covered, or indeed composed of a kind of light scoriæ, abundantly filled with pieces of broken sticks and herbs in a state of petrifaction. The waters scarcely leave any deposit beyond a slight coating of white salt, yet they have a very perceptible smell and flavour of sulphur. The vapour appears to have no deleterious effect on the surrounding vegetation, since fine, although short, grass grows round the immediate edges of the springs; and it is very remarkable that the mimosa and other small bushes actually in many places overhang the boiling fountains, close to which their roots are situated. In some of the springs, which are frequently seen as round as wells and perforated through the solid rock, a perceptible rise and fall is observable at regular periods; but in others, the bottoms of which are choked with stones, a more remarkable phæ-

nomenon may be observed. After boiling furiously for a few minutes to the height of two feet, the water suddenly sinks; the earth gives forth a sucking sound; the base is left clear of water or even steam, and the stones in an instant become perfectly dry; so that I frequently stood on them, until warned by a low whistling sound of the returning gush, which was instantly thrown out with as much force as before.

There are some springs of inconsiderable size which have stopped entirely, and broken out afresh near the old site; and again it has occurred that a clear fountain has suddenly become muddy or the reverse, even to a perturbed one instantaneously becoming transparent.

September 14.—We left our low mud room at an early hour, riding S. E. by E. past the boiling springs, which in consequence of the coolness of the morning air appeared to give out more than ordinary smoke. As we travelled onwards, my servants informed me that a design had been laid at Ystlan to rob me while I slept, by four men,

who proposed to one of them to assist and share the booty. This man indignantly refused, but the rogues hovered round the hut all night; seeing the servants lying awake for the purpose of watching them, they had the effrontery to threaten that we should meet again on the road. I however paid no attention to this, until riding some little distance a-head, as was my custom, I observed four well-mounted and armed men drawn up in the centre of the road, and by a sign from my people knew these to be the rogues in question. They eyed my double gun as it lay across my saddle in readiness, and also saw the three men quicken their pace to join me. As soon therefore as I had passed between them, and exchanged the compliments of the morning with him who appeared to be the leader, two of the party galloped off into the thickets, and the others returned at a brisk pace towards the town, having spoken to the man who, from having served in the same regiment with one, (a notorious character,) had been asked to join them. Soon after this we came up with some pure In-

dians, who did not sufficiently understand Spanish to tell us where they were proceeding with some large frames, entirely filled with carved and painted calabashes, which they refused to sell. These people were dressed in coarse black woollen tunics striped with gray; each bore a long slender staff in his hand, and they all walked in a line with a kind of shuffling step which almost kept pace with our horses.

The road lay over cultivated plains, and here and there through thickets; when, after crossing a woody dell, we descended to a swampy plain of five miles in diameter and entirely surrounded by mountains. On the eastern side of this is situated the town of Zamora *, which we reached after weary wadings through deep morasses, and over useless little bits of causeways and bridges. I passed through the outskirts of the town without stopping; but it appeared to be a place of some consideration; has three or four large churches, and many of the inhabitants are said to be wealthy and to keep their carriages.

* Seven leagues S.W. of Ystlan.

In this place, and also in several Ranchos which we had passed, I observed that the houses had sloping roofs, the greater part of which were neatly tiled, while some few were covered with Tajamanil (or wood shingles). Hence we passed for some distance over a raised but very roughly paved causeway, through the swamp, from whence we ascended hills, where a heavy storm set in, and pelted us most unmercifully for three or four hours, until through mud and misery we reached a ruined hut * in which soap had formerly been manufactured, although there were few signs of that material having ever been used by the inmates. Here we procured a sheltered corner, amidst smoke, filth, and two of the most wretchedly miserable families I ever saw, who, though almost starving and having nothing to guard, maintained seven meagre and barking dogs, and a more persecuting army of fleas than had ever before tormented me. A poor man here was crippled in a most extraordinary way, having lost by some species of

* Having travelled from Zamora five leagues S.E.

decay nearly all his toes and fingers, and the few remaining ones had every appearance of speedily falling off also. Except being thin from want of proper sustenance, he was to all appearance healthy, and could not in any way account for this infirmity, which had attacked him after he had arrived at manhood.

September 15.—I was rejoiced when daylight allowed me to escape from the hut; and wading over an uneven grassy country, we passed at two miles to the right of the little town of Tlasasalco, whence Purupéro, a small Indian village, is distant about one mile on the other side of the road, and hidden by the trees. Our way now lay through the gorges of woody mountains, amongst which every opportunity had been taken of cultivating the land for maize. Occasionally we passed a solitary hut, and several crosses and cairns marked the path of Revolutionary war. Riding through a portion of the mountains covered with pines, we arrived at 4 P. M. * at Cipiméo, a small Hacienda with a neat

* Having come E.S.E. thirteen leagues.

new Meson; but neither here nor in the cottages round could we procure one single thing to eat: and it is a remarkable circumstance, that in this country, overrun as it is by thousands of fine cattle and sheep, not one Rancho hut in ten possesses an ounce of meat, either fresh or dried. Looking out of my window, I was witness to an infantine amusement which would rather startle English mothers and nurses. A party of little children were diverting themselves with a large rattle-snake, which in all its vigour was tied by the middle to the lash of a small whip, while the delighted urchins were teazing it with pieces of stick, which they presented to be bitten. Being a novice to this species of fun, and not liking the angry rattles or savage springs of the reptile, I asked the merry little group to kill it; but my proposition was in vain, and they ran off to enjoy their dangerous plaything uninterrupted.

Cipiméo and its neighbourhood had been the scene of some important battles during the Revolutionary war, at which period the Hacienda was

rich and extensive. General Negrete and the Spanish troops made it their head-quarters, but during their stay the house was mined by the Insurgents, and the time appointed when it was to be sprung; a woman, however, discovered to the general his danger, and the place was abandoned: but Padre Torres, the priest, the most bloody of all the Revolutionary leaders, in revenge for the escape of his prey levelled the Hacienda to the ground.

September 16.—Leaving Cipiméo early in the morning, we rode into delightful shrubberies in a small wild Barranca, where the little river Cipiméo, which rises in a neighbouring swamp, was tumbling in a beautiful cascade of thirty or forty feet, amidst rocks and trees. On fording the transparent stream, we found all the inhabitants as well as curs of a few huts in loud pursuit of a mad dog, which gave them a fine chase; and after a shower of blows from sticks and stones the wretched animal escaped into the wilderness. This was the first time I had heard of the

existence of hydrophobia in Mexico, where it is called *el Mal*; but one of my people very gravely informed me that all danger from a bite might be avoided by the simple process of burying the unfortunate dog under a Fresnillo or ash-tree! From the ford we rode over a perfectly level plain, alternately dry and swampy, E. by S. six leagues. Fine mountains hemmed it in on either side at about three leagues apart, and thousands of brood mares and cattle covered the surface of the "Llano del Quatro," while its borders were dotted with Ranchos and Haciendas. The quantities of orioles were at this place quite extraordinary, following and feeding amongst the cattle, on whose backs they perched in great numbers with the most perfect familiarity. When disturbed, their flocks darkened the air; and some idea may be formed of their abundance, from the fact, that with one discharge of my fowling-piece I killed enough to fill a pocket-handkerchief. There were three varieties of these creatures; one perfectly black, another having a yellowish head and neck, and the third

bearing a bright yellow spot on the first joint of the wing; but all associated in common, and possibly may have been the same species in various stages of age and plumage. Crossing a small hill we breakfasted under the shade of some bushes near a hut, where we procured an abundant supply of whey, for which the Ranchera refused any payment, saying that "she sold nothing to travellers, but gave what little she possessed with pleasure." I could have embraced the old woman as the first and only person in Mexico whom I ever knew to refuse money. Travelling four leagues we arrived at the Hacienda Técacho, a pretty retired little spot, traversed by some small rapid streams. Here, in a paved circle, several horses were treading out the wheat, to be ground in a small water-mill. I made a drawing of the process, which was very neat and simple. In five leagues further to the S. E. we reached the Rancho of Teristerān, where we put up under the eaves of a hut, and procured but indifferent fare, for which our hosts, although comparatively wealthy, charged exorbitantly.

Sept. 17.—On the morning of the 17th the women of the family pestered me in addition for rings and trinkets, "as the English," they said, "although not Christianos, have always things to give away." Our road now lay amongst the woody dells of the mountains, in one of which a long natural fissure was pointed out to me, as the road by which the Indians of the ancient city of Tsinsunsan, a day's journey to our right, "were accustomed before the Conquest to carry provisions for the table of Montezuma with such expedition, from hand to hand, that on arriving at Mexico they were still warm!" The distance is nearly 100 leagues, which to the country-people, who delight in the marvellous, renders the story the more orthodox in proportion to its impossibility. This city of Tsinsunsan, was once of considerable extent, and the residence of the king Calsouzi, who was an ally of Cortez, and assisted with his Chichimecos in the subjugation of Mexico. The palace of this monarch and other interesting remains are still to be seen on the borders of the

lake of Pascuaro, which is of considerable size, and in many respects well worthy of a visit; but as I travelled not on my own account, I did not feel myself authorized to make it.

The Indians in Tsinsunsan are still unmixed in blood with their conquerors, and the Zaresco language is the only one spoken by the greater part of them. In the lake, the Pescado Blanco, so deservedly celebrated, is caught in great abundance, and near its borders are situated some rich lodes of copper. In six leagues amongst the hills we reached a plain, and entered the city of Valladolid *, having traversed a well-built causeway and some small bridges across an extensive morass. I had considerable difficulty in passing my baggage at the Guarita, owing to the impudence of the people in charge of it, who had acquired just sufficient of our "vulgar tongue" from English or American travellers to be very saucy and familiar.

I was much struck, on entering Valladolid, by

* About east from Teristerān.

the width and airy appearance of its streets, the goodness of the houses, and its magnificent cathedral; and I put up at a very large and superior meson, with clean, spacious, and newly painted rooms. I was, however, much annoyed by constant tappings at my door, more or less loud according to the imagined merits of the case, by herds of beggars, who in the name of the Blessed Virgin, or Our Lady of Guadalupe, implored charity. In the evening I visited the Alameda and Paséo, both on the eastern side of the town. The first is a straight broad walk, paved with flat slabs and bounded on either side by low stone walls and benches, overshadowed by rows of fine trees, whose branches frequently joined in the centre. By the side of this runs a portion of the Paséo, which is a road of sufficient width for two carriages, and extending about a mile to the southward, branching off into shady lanes leading to various parts of the southern suburbs. These walks, or drives, are exceedingly pretty; and the effect of the entrance to the Alameda is heightened by being crossed by a portion

of a fine aqueduct of excellent masonry, on light ornamental arches, which, including a branch from the main course, extend about a mile to the foot of a hill eastward of the city.

As it was Sunday, all the gay people were in their best clothes, and rambling in the public walks, amongst which, clumsy heavy carriages driven by dirty ragged postillions were rolling, laden with ladies in court-dresses and plumes of feathers. All were smoking, and eating alternately, between their puffs of genuine Orizaba, cakes and painted sugar-plums, which two or three dirty old Leperos were carrying in baskets on their heads for sale.

Returning from the walk, I passed a house from whence issued so much noise and such a jingling of dollars that I was induced to enter, and found a motley group in a spacious cockpit, paying their debts of honour over two dead birds. I passed round the pit, which was crowded by a set of cut-throat looking fellows, in blankets and rags. Here pulque, the juice of the tuna, and fiery mescal, were selling in great quantities, to the evident be-

wilderment of some of the gentlemen sportsmen, of whom many were lying drunk and asleep upon the benches, while others were sitting or rolling about with their eyes starting from the sockets, and in a happy state of uncertainty as to whether they should sleep or quarrel. I was pleased, however, to find amidst all the noise and confusion, that although my dress marked me as a stranger, not an insulting word was said to me, but on the contrary some of the most tipsy of the party pulled off their hats. I note this apparently trifling circumstance, as affording so strong a contrast with the reception of strangers at Zacatecas, and as tracing on my approach to the capital the diminution of those prejudices which are rather cherished than suppressed in the Northern States.

At night-fall a very severe storm of thunder and lightning burst over the centre of the city; rain and hail came down in torrents, and the forked lightning was more than usually vivid. During this war of elements, a boy was sent to the tower of the cathedral, to toll as rapidly as possible the

great bell, which, having been expressly blessed for this kind of service, (as a learned priest informed me at the time,) has the virtue of calming all tempests;—a fact I can bear witness to; since at the expiration of three stormy hours, during which the tolling was hurried and incessant, the clouds dispersed, and the sky, cleared of its load, became as bright and starry as if nothing had happened.

September 18.—I waited with a letter of introduction on Don Pascual de Alsua, brother-in-law of Iturbide, who was a native of Valladolid, and whose relations still live here. The town's-people were at this time generally supposed to be attached to the party of the late Emperor; but they are now, and as far as I could observe, justly, considered to be amongst the most peaceable people of the Republic, although during the war their excesses and cruelties towards the Spaniards were notorious.

The city of Valladolid pleased me more than any I had hitherto seen *. It has indeed but one

* This opinion I carried through the country with me, excepting only Xalapa, which from various dissimilarities cannot

principal street; but this is broad, clean, and cheerful; so that a stranger escapes all the filth, misery and crowds, with which most other Mexican towns abound.

The Plaza is remarkable as having broad piazzas on three of its sides, and the fine cathedral isolated from all other buildings bounding it on the east. A crowded market is held here, and the venders display their goods, as is the general custom, beneath the shade of rude mat umbrellas. Fruits and vegetables are tolerably abundant; and amongst other luxuries, the pescado blanco (or white-fish) is brought from the lake of Pascuaro. The night market on the Sunday is extremely pretty; each little shop having a bright blazing pile of the fragrant Ocote (red pine) in its front, so that from an elevated window the scene is very lively and peculiar. All the houses of Valladolid have flat roofs, the same as in Old Spain, with long water-spouts

be fairly advanced as a comparison with it; being a retired comfortable-looking place, of quite a different character from a city.

projecting most incommodiously over the streets. On many of the terraces a fine crop of grasses and mosses was flourishing so luxuriantly, that I am astonished at the natives not having taken so good a hint for making little gardens on their roofs, which would give a fresh and lively appearance to the city.

The cathedral is a fine building, and although crowded with ornaments, these are arranged with great taste. The choir is remarkably beautiful, and the organ, which is small and placed on one side within the screen, has a fine ornamental veil or facing, of a richly carved unpainted red wood. From the choir to the grand altar is a broad walk inclosed by pillars and a ballustrade of silver, surmounted by statues of the same metal. On either side is placed a pulpit, cased with its stairs in richly embossed silver, said to have been procured from the mine of San Pedro del Barreno at Ozumatlan. However great the quantity may even now appear, it is but half of what ornamented the church before

the Revolution, during which the generals of both parties robbed this temple with very little scruple, of a commodity so conveniently made to their hands. The grand altar is dazzling with pure gold and silver, so disposed as to have a rich, without a tawdry effect. All the plate indeed in this church possesses a merit rarely seen in others; that of being clean and well polished, so as to look like what it really is, instead of resembling dirty pewter, the general hue of Mexican church ornaments composed of this valuable metal.

There are several other churches at Valladolid, two nunneries, and four monasteries, all very much alike. In the chancel of one are statues of The Saviour on the cross, attended by Joseph and Mary gorgeously apparelled and as large as life, flanked by the two crucified thieves, who with Indian features and hair are clothed in open-knee'd breeches of bright striped stuff, with white frilled drawers peeping from beneath; the Indian costume in the present day.

The population of the city is said to be 15,000.

In addition to which, is one regiment of cavalry, the soldiers enveloped in capacious jackets and trousers, all of one size, and wearing round hats, incircled by a broad tin band having the number of the regiment displayed above it on a round plate of the same material. The poor fellows, who as Vaqueros would be active and warlike, seemed sufficiently wretched in their new trappings and European stirrups and accoutrements, with which they can scarcely sit their horses. There is also selected from the inhabitants a "Milicia Activa" of 1500 men. The town has on the eastern side some show of fortifications, and its approach from the west is naturally defended by the extensive swamp. In my rambles I greatly enjoyed the ices, which are very good here, the frozen snow being procured from the mountain of San Andres, which lies to the westward, and from its winter cap supplies all the ice-houses.

September 19.—We set out early in the morning for the mine of Ozumatlan, but suffered another provoking detention at the Guarita or Custom-

house guard; in addition to which, one of my best cargo mules which had injured its spine by a fall, became quite unable to proceed further; I therefore gave it to a poor Indian, who promised to take care of, and endeavour its cure. Riding E. by S. five leagues, we reached Charo, a small village with a large church; and thence, in four leagues further, arrived at the Pueblo of Yndaparápeo, in which, as in the former one, all the houses had [illegible]ing roofs, and were covered with wood shingles of a good length and breadth. Here, under one of the broad projecting eaves, a large party of women were assembled, having boiled camotes (the sweet potatoe), tunas and apples, piled in little heaps before them; while large earthen jars of pulque, of all palatable degrees of strength or sweetness, were ranged by their sides. As we approached the group, they all hastily poured samples into their little gourd bowls, and crowded anxiously round us, to learn whose jar was the most to our taste. I drank of the sweet sort, my people of the strong; and all were satisfied: though one fellow, an old

soldier, very roguishly drank off all the samples before he would give an opinion. Proceeding two miles further in the same direction, we turned off to the S. E., and ascended the intricate mountain paths, which in four or five leagues became so numerous, that we lost our way and rambled about for three hours, until we found a guide to show us how to cross the Barrancas. At length in two leagues more we entered a deep dell, between steep woody mountains, up which we proceeded south, three or four miles, when after dark and thoroughly wetted by heavy rain we reached the mine and miserable little village of Ozumatlan.

Before entering the glen, I had seen from the mountains the large lake or plain of Araron, lying about four miles to the northward, from whence a very fine salt is procured as an efflorescence, and there are also said to be some boiling springs resembling those of Ystlan.

September 20.—On the morning after my arrival I walked in a heavy rain amongst the woods in the mountains to visit the shafts of the old mines, and

in the evening entered the Socabon, which running 500 yards into the base of the mountain now cuts a very rich vein of ore.

September 21.—The rain continued without intermission until the following morning, when after a cessation of two or three hours it returned with redoubled force. The dampness and cold of the atmosphere at this season is exceedingly unpleasant, and what we in England so well understand by "raw weather" would give a good idea of the climate of Ozumatlan during the rains, which continue four or five months.

In the evening I waded to the priest, whom I found living in patriarchal simplicity in a mud hut. A pig lay sleeping on the threshold; a lepero was stretched at full length on the clay floor; and an old woman was snoring on a bed in one corner, while the Padre himself was taking his siesta on another. The good man appeared to be of half Indian blood, was mild and gentle in his manners, and troubled himself but little about any other worldly concerns, beyond the care of his simple

parishioners. He was well acquainted with the neighbouring mines, and gave me some interesting information about them under a heavy cloud of tobacco smoke, which "kept him alive in this wet weather."

September 22.—In the forenoon, I squeezed myself through the extraordinary socabon of San Pedro (old), which by a narrow and tortuous course was driven many years since, and for a time effected the partial drainage of that mine; and afterwards made a hurried sketch of the village from beneath my umbrella. Ozumatlan is situated in a very deep narrow Barranca, between abrupt and almost precipitous mountains, which are clothed to their summits with fine firs, oaks, and various other timber trees. I had no barometer with which to ascertain its elevation; but from the nature of the country, the lowness of its temperature at this season, and the fact of the mountains being generally enveloped in heavy clouds, I should conceive it to be nearly 8000 feet above the level of the sea.

To the southward on crossing the mountains

for three or four leagues is a descent to the Tierra Caliente, from whence fruits and vegetables are brought to the village market. The direction of the ravine, which is filled with little short turnings amidst a thick and beautiful shrubbery, is about north and south, for three or four miles. Its width is entirely occupied by the path-way, and a rapid mountain torrent, supplied in all directions by innumerable little rills. From the narrowness of the valley there is scarcely a flat space to be found for cultivation, and two or three apple orchards, with here and there a very small spot of maize, is all the husbandry which appears. Amongst the shrubs the American-hawthorn is here very abundant, and its beautiful apple-shaped fruit (excellent when preserved) absolutely covers the trees with its brilliant clusters, resembling the Siberian-crab in size and colour.

The mountains produce the red and white pine, the spruce, larches, cedars, the roblé and encino (oaks), beefwood, and, according to the natives, ebony; also the plane-tree, mimosa, and an infinite

variety of trees and shrubs, of which many are very beautiful, but which I have not the science to enumerate. The red pine is of two kinds; from one the Ocote (or candle-wood) is procured, the other furnishes the Tajamanil (or thin wood shingles) which are used in roofing houses and huts. The village is situated in the only flat open space which could receive it with its church; and scattered little huts are perched here and there, amongst the close thickets on the mountain's brow. The air of discomfort of this little spot in the rainy season is very striking; but I am told that in the summer it becomes far more agreeable, although very sultry. The huts are merely composed of stakes driven closely together into the ground, or walls of sun-dried bricks, which are called "Adobe;" above these the roof, supported by props in many instances entirely independent of the walls, is thatched by shingles of fir, a yard in length and four inches wide. These are generally laid with some regularity, so as to keep out the heavy rains; and besides being tightly pegged down

to their supporting beams, are retained in their places by some dozen large stones ranged upon them at short distances. Pigs, dogs and people, live huddled together in the utmost harmony, in these confined spaces; and all—for the honour of dirt be it spoken—have the same appearance of health and perfect contentment. The population at this period might amount to about four hundred souls, over whom reign without opposition an Alcalde and the Padre. The church, which was once good, is large; the walls not having suffered when the Spaniards in the late war sacked and burnt it and great part of the village, in revenge for not having found the natives so rich as a vicinage to Ozumatlan might be supposed to have made them.

The people are quiet and orderly at this place; and if no evil-disposed person gets amongst them, will be aware of the advantages which must accrue from Englishmen settling amongst them and working the mines. The intellect of the rising generation is not entirely neglected, for under the sheltering eaves of a cottage I two or three times ob-

served about half a dozen boys and one solitary girl, sitting on a log, and roaring out their respective lessons to a schoolmaster, who at the same time was reading aloud. It is indeed a singular but almost universal custom in this country, that in all the schools, every child is to be heard screaming out its task at the same moment; and, as the teacher usually walks about while all this is going forward, and is apparently very little interested in the business, I cannot at all conceive how his scholars ever contrive to learn to read.

In all that I could observe of the poor natives of the place, there is, by their perfect exclusion from the world, a simplicity and quietness of manners which might be turned to the best purposes by the foreigners who settle amongst them; and I could not help picturing to myself, a number of little plans for their comfort and convenience, the execution of which would lighten the extreme solitude in which the directing English agent must necessarily live.

I know not a place so buried amongst the wild

woody glens, as Ozumatlan;—the most extensive view is from one side of the narrow Barranca to the other; and the general silence is broken only by the harsh rattling of the turbulent little stream, which rushes past the residence of the English, and through the centre of the village.

The mineral riches all lie amongst the mountains which form the eastern side of the Barranca, in the mines of "Los Apostoles," "La Machora," and "San Pedro del Barreno," now the property of the Real del Monte company. To the south of these is the mine of La Piedad, worked by the administrador of an European Spaniard; and on the east is that of La Purissima, occupied by a company of natives. To the north lies the mine of San José de Gracia, the property of a gentleman in Valladolid.

Sept. 23.—Attended by one of my servants in a high fever, and suffering greatly from rheumatism myself, owing to the chilling damps of the valley, we set out at an early hour up the eastern range of mountains, as I purposed visiting the mines of

Flalpuxahua on my way to Mexico; I therefore avoided the northern road from the valley, which in four leagues brings the traveller to Cinapecuaro, a neat town near which are said to exist a mountain abounding in obsidian, and some boiling sulphureous springs. Our road up the mountain was by a very difficult path amongst the woods; and descending by one quite as bad, we rode ten leagues through thick forests of firs * and oaks †.

We now came to a cultivated plain, over which for six leagues a heavy rain accompanied us; and of two horses which sunk in a bog, one was extricated with great difficulty. At sunset we reached the little town of Tajimaróa, and put up at a ruined "quartel" for soldiers. Our route had been E. S. E. sixteen leagues, and was very comfortless, without much to interest me except a party of Indian women whom we met while the sun was strong,

* One of these which lay on the ground was twelve feet in girth and ninety in length.

† Many of the oaks were fifteen feet in girth, carrying up a straight stem without a single branch, for forty or fifty feet.

and who sold us some cool ripe peaches and tunas. In the woods we saw three different holes, which had recently been opened, at the foot of remarkable trees or rocks, where money had been buried at the time of the disturbances.

Sept. 24.—My feverish servant, owing to two copious bleedings I gave him, being now quite unable to go forward, I settled every thing for his comfort, and left him one of my horses on which to find his way home after his recovery.

This being Sunday, the market-place or square was crowded with Indians in their best clothes, and carrying large bunches of flowers in their hands, or wreathed into the women's hair. It is believed that one of the great incitements to the Indian war at Chapala, originated at Tajimaróa, where for some trifling offence a Spanish officer had caused the Alcalde of one of the tribes to be flogged round the Plaza.—On setting out we found the broad level road crowded for a time with Indians from the village of Arimbo, which we passed in two leagues to the eastward.

Three miles to the S. E. of Tajimaróa is the Indian village of Tuspan, the last in the state of Mechoacan or Valladolid, so that we had now entered on that of Mexico. On our journey we passed an immense concourse of people bearing a large covered picture of Our Lady of Guadalupe across the plains to its proper church, whence it had been lent to hallow a mass in a distant village. Four horsemen preceded this holy painting, and all the Indian women bore large bunches of flowers in honour of this their favourite saint. Scarcely was the procession out of our sight, before the rain came down in torrents, accompanied by heavy thunder and lightning. To add to this, we now entered on, and rode for eight leagues through, clayey roads flooded up to the knees of our cattle, and it was not until after dark that we reached the mining Real of Tlalpuxahua; there, thoroughly soaked after a ride of eleven hours, we found the Meson full of travellers, and at last, as an act of charity, were received into a hut, of which a poor woman recently confined occupied one corner.

Sept. 25.—I this morning waited on the Chevalier de Rivafinole, director of the Tlalpuxahua mines, who very obligingly insisted on my passing the day with him and visiting all the operations, after I should have witnessed the performance of a ceremony which was quite new to me. It was the public blessing of a mine, "El Tajo," then about to be cleared of water. For this purpose the Padre, attended by a great concourse of spectators, assembled under the large new Galera or shed, which was erected over the shaft and malacate, and prettily ornamented with green boughs, flowers, shawls, handkerchiefs, and tinsel, while three show horses gaudily harnessed and attired stood near the malacate. At a small temporary altar adjoining the mouth of the shaft, the Padre put on his canonicals, when attended by two godfathers, who stood near him with lighted tapers, he read a blessing on the undertaking, at the same time sprinkling holy water where that element was already but too abundant. He then with great solemnity blessed the malacate, the show horses, and

the stables; after which the first Botas, or skins of water, were drawn from the mine; while hundreds of hand-rockets were let off in all directions, and wine, cakes, and rewards to the workmen were distributed. After this ceremony I visited a small steam-engine, nearly completed, over the mine of Malduermes, and once the property of Mr. Wilcox, at Temascaltepec. The mines of Ocote, the ores of which are excellent, and those of Las Virgines, also very good, were the next I visited. At the mine of Los Santos Martyres I observed a good promise of gold and silver ores, and brought away some fine specimens. On the whole I saw about twenty mines covered with extensive and well built Galeras: every thing appeared in active progress, and promising. I also went to a new Hacienda whose Patio was covered with tortas of ore, and one more ancient, with several more in progress. Here I found the produce of seven cargas of Pepena from Ocote, forming into Cuerpos to the amount of thirty-four marks and a half. The process of amalgamation is here four, five, or even

six weeks, for which I cannot at all account, as the average temperature of Zacatecas is lower; yet from eleven to fourteen days there, at this season, are generally sufficient. The miners here are Germans, and their chief, Mr. Burckhardt, is a man of science and talent. Tlalpuxahua lies deeply embosomed amidst richly wooded mountains, frequently intersected by deep ravines, and is traversed by a small river which goes by the same name. From hence a great command of water can be obtained at all seasons, and the stamps and other machinery are now worked by its power, which might yet be more generally and effectively used. The mercury stood in a barometer by Carey, according to Mr. Burckhardt's observations, at 22·470 inches. The thermometer being at 15·6 Centigrade. The town is built without any regularity, but contains several large and very good houses, two churches, a chapel, and two mesons: the people are well-behaved and quiet, and the place is certainly one of the most desirable mining residences I have seen. A letter from Mr. Rivafi-

nole introduced me to Mr. Walkinshaw, the gentleman in direction of the mines of El Oro, about two leagues to the N. E. of Tlalpuxahua on the opposite side of a finely wooded Cerro. El Oro, the property of the United Mexican Company, has a wretched little village round it, and the mines are still very backward, although that of San José Coronado has lately sent up some tolerable stones of ore. Its depth is 150 yards, and two malacates were at work on it for the *Desagua* and produce. The mines of El Oro were formerly productive, and a carga of twelve arobás (three hundred pounds) was once sold at the shaft mouth of the mine of Zapateros, for 11,000 dollars.

I had often heard of an animal named Zorillo, a kind of pole-cat, which is abundant in some parts of Mexico, and wished much to experience the effects of the pungent odour it has the power of emitting when pursued. In Mr. Walkinshaw's house my curiosity was more than satisfied, his dogs having recently killed one of these creatures. They were in consequence so impregnated with its smell, as

to communicate it wherever they went, and with such strength as to cause a severe pain in the head. I know not how to describe this peculiar odour; but it is worse than any thing I ever experienced or could have imagined. The animal, as far as I could judge from its mutilated carcase, is the size of a very young badger, and much resembling that animal in the disposition of its colours. It is said to be slow and inactive; but until my sense of taste or smell should fail me, I never could have the hardihood to chase it. From El Oro Mr. Walkinshaw obligingly accompanied me part of my way through beautiful woods, interspersed with lovely dells and plains. Here and there we saw groups of fine half-wild cattle, and the blue jays and scarlet-headed woodpeckers were very numerous amidst the magnificent firs and oaks. I rode four leagues through this charming scenery, and four more over clear well-cultivated ground, covered with crops of maize and barley. Having made eight leagues E. S. E. from El Oro, I arrived at the large castle-like Hacienda of Tepetit-

lan, where even for money I could not procure a morsel of food; but my people found their way into the kitchen of the ladies who own the estate, and obtained a little piece of beef for a very hungry caballero. We were lodged in two small rooms built against the Hacienda wall, and dignified by the name of Meson.

Sept. 27 (thermometer 5 A.M. 54°, 2 P.M. 70°). —I set out very early this morning with one man, sending the cargoes by another route to Toluca; it being my purpose if possible, to ascend the remarkable mountain and extinguished volcano which lies to the southward of the city. Riding E. S. E. about six leagues along the northern foot of a range of high hills, and having a cultivated plain on our left, we afterwards cut across the country in a S. E. direction, and with the *Volcan* for our guide passed for six leagues over arid plains deeply furrowed with abrupt gulleys and fissures. On the only cultivated spot, at a cottage door I saw the stuffed skin of a lamb, having one head, four ears, two of which were liver-coloured,

a very thick neck, and two perfectly distinct bodies, each having its legs properly formed and placed. I tried in vain to purchase this little monster, but its owners valued it too highly to part with it. From the rugged plain we rounded some low hills, and in three leagues to the eastward entered the city of Toluca, where I obtained an indescribably dirty room and very bad stabling, at the Meson de la Plaza. The mountain proved to be at least ten miles to the southward of the town: it was covered by heavy clouds, so that nothing could have been seen from it; and as I had already ridden ten hours, and was far from being well, I decided on not even attempting to visit it on the morrow, much as I wished to have seen the large lake which fills the crater to a considerable height, and is surrounded by cliffs of above a thousand feet in height. The summit of the mountain, according to Mr. Burckhardt, is at an elevation of about 15,400 feet above the sea. During the greater part of the year it is capped with snow, of which a considerable portion still remained.

Sept. 28.—Toluca is a large and important city, and is situated at the foot of two steep barren hills. To the southward is an extensive and picturesque plain, covered with rich crops of grain and enlivened by numerous neat Haciendas, with their pretty churches rising above the bright green harvest. The volcano is, as I have already said, ten miles to the south; and beyond it and the ridge of adjacent mountains are the fertile plains of Quaotlamilpas, where the sugar-cane is abundantly cultivated. The city at the time of my visit was all bustle and confusion, owing to its being the electioneering head-quarters, for the naming of deputies to the Congress of the free and *sovereign* State of Mexico *. The eventful day was close at hand, and the distribution of pamphlets and inflammatory papers, for or against certain parties, was going forward with as much rancour and violent feeling as is usual in some parts of the Old World. The voters

* Commonly called in the capital *el Congresito*, or the little Congress, to distinguish it from the General Congress of the Republic.

had crowded in from all parts of the country; and in order to keep these genuine sons of freedom within proper bounds, a large body of troops had been marched in from Mexico, parties of whom constantly paraded the streets. All the mesons, with the exception of the one I lodged in, which also sheltered a host of voters, were filled with these warriors. I can scarcely venture to dwell on the extreme dirtiness of this inn: the stairs were almost impassable; and the galleries crowded with beggars, and maimed miserable objects. Fodder for cattle was scarcely to be procured; and as for man's provision, it was only to be obtained from sundry old women who sat frying savoury messes in the streets. I was too unwell to ramble through the city; but its Plaza and those streets through which I passed were airy and handsome. I left the place in the afternoon, by a straight shady causeway extending a mile to the eastward; and riding four leagues in the same direction, arrived towards sunset at the little town of Lerma, which had been in sight, in perspective, the whole

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length of the broad straight road. This place is surrounded by an extensive morass traversed by fine raised causeways: and hence rises the Rio Grande, which under various names finds its way to the Pacific Ocean, near San Blas. The pools of water are here beautifully transparent, and the tall reeds with which the swamp is filled are the resort of a great variety of water-fowl, amongst which I counted in a very small space thirty-nine white egrets. On entering the town I was stopped by some odd-looking dragoons, who insisted on taking away my arms from me, as I came unprovided with a permit, to take care of my safety:—an admirable piece of justice towards robbers, who are rarely punished if taken; and by the kindness of a parental government, which prohibits travellers carrying weapons, their professional risk is considerably diminished. In candour, however, I must say that the laws of the state of Mexico are in many cases put in force: but in the northern provinces, where no crimes are punished, the edicts respecting arms are in the highest degree encou-

raging to the "Knights of Industry." I trembled for the safety of my weapons, if left in the hands of so respectable a body of troopers as those who now surrounded me; but happily thought of demanding a receipt from the officer, who fortunately could not write. I finally escaped, by his saying my arms would be taken from me at the other barrier when I quitted the town. I lodged at a small dirty meson; and being still unwell, retired early to sleep, when I was aroused by an indignant Ranchero, who had been stopped the same time as myself for carrying a sword. He now brought me a "permit" from the Alcalde, to whom he had voluntarily become my bail for good behaviour; declaring that he knew me well, and giving a list of my marks, age, and other particulars to be inserted in the pass. This, however, would have been of little avail, if strictly examined; as my friend having only seen me for a few minutes on horseback and wrapped in a cloak, had given the most erroneous description imaginable of my person.

Sept. 29.—I set out with this worthy Ranchero

early in the morning for Mexico; and on leaving the town passed a rude kind of turnpike-gate, where we paid toll at the rate of a real for each laden beast and a medio for every loose one. This tax is exacted for the express purpose of keeping the road between Lerma and Mexico in repair: but had parties of men been employed to destroy this once magnificent military causeway, they could scarcely have made it worse than it is in many places; and not an effort seems to have been made to prevent its becoming equally bad throughout. We soon ascended the mountains, and travelled through delicious forest scenery, where firs, cedars and oaks, were growing with a freshness I had never seen excelled. Groups of market Indians, travellers, and laden mules, with now and then a lumbering coach drawn by eight mules, gave animation to the roads, and at the same time a hint of our approach to the populous capital. About midway between Lerma and Mexico is a small clear space in a woody defile, distinguished by the name of "Las Cruces," and marked by

several rude crosses, some of which are now falling into decay, while others yet bore the remains of faded wreaths of rushes or flowers. These frail memorials point out the site of one of the first and most sanguinary of the Revolutionary battles between the Cura Hidalgo and the Spanish general Truxillo, in which the latter was totally defeated with great slaughter. The scene elsewhere was enlivened by abundance of little wooden huts, scattered here and there along the road side, with their only room embellished by shelves bearing rows of glittering bottles of the fiery deleterious brandies of the mescal and sugar-cane. Jars too of foaming pulque stood clustered in shady corners, inviting weary muleteers to refresh themselves previous to their entering the "Great City of the Lake." From an eminence we came suddenly in sight of the great valley of Mexico, with its beautiful city appearing in the centre, surrounded by diverging shady Paséos, bright fields, and picturesque Haciendas. The great lake of Tescuco lay immediately beyond it, shaded by a

low floating cloud of exhalations from its surface, which hid from our view the bases of the volcanos of Popocatepetl and Iztaccihuatl; while their snowy summits, brightly glowing beneath the direct rays of the sun which but partially illumined the plains, gave a delightfully novel appearance to the whole scene before me. I was however, at this distance, disappointed as to the size of Mexico; but its lively whiteness and freedom from smoke, the magnitude of the churches, and the extreme regularity of it structure, gave it an appearance which can never be seen in a European city, and declare it unique, perhaps unequalled of its kind. We reached it after riding twelve leagues from Lerma, and passing on the last descent through the village of Tacubaya, entered by the side of an aqueduct extending a mile in length, bounded on either side by a shady road raised above the surrounding marshy ground.

CHAPTER IX.

Entrance to Mexico—Beggars—Theatre—Paséo de las Vigas—Environs—Palace of Chapultepec, the site of Montezuma's Palace—Nuestra Señora de los Remedios—Universidad—Botanic Garden—Senate—The Portales—Plaza—Markets.

At the outer barrier the Custom-house searchers were more strict than I had ever before found them; and not even a box the size of my hand escaped being opened and examined, although I had all the required passports. I at last created great amusement for the by-standers, who on these occasions are very numerous, by reminding the pompous man of office that he had forgotten to look at the inside of my watch, which I opened for his inspection. After a delay of nearly two hours I was permitted to reload and proceed; and at length found my way to the Calle Balbanéra, where I put up at a meson of the same name, and about on a par with that of Toluca, but considered

one of the best in Mexico. Here in a moment my room was crowded by pedlars and importunate beggars, armed with an irresistible claim to charity in the name of the Protectress of Mexico, Our Blessed Lady of Guadalupe. Being hungry, and my hotel furnishing me with nothing but water, a chair, and a rickety table, I sent a servant to an eating-house to procure a dinner for me. It came at length in the shape of two square bits of dry tough mutton fried in pig's fat, and placed in a large dish of coarse brown crockery, which would have contained fifty more such morsels. About an ounce of mashed cabbage sprinkled with hard yellow pease, and a bowl of "Caldo" (literally hot greasy water, called broth) accompanied my meat; and a green chili and a piece of bread completed my repast. I was also furnished with a fork, but no knife; the latter is seldom supplied. I paid as much as if my dinner had been composed of the greatest delicacies; and a boy who attended demanded, and of course received, a present for the expedition and cleanliness with which I had been served.

Somewhat refreshed by this sorry meal, I waited on Mr. Exter, agent for the Bolaños Company, who very obligingly offered me a room in his house; but this I declined, as it would have greatly inconvenienced him. I promised, however, to become his guest during the day. At night, after having enjoyed a very comfortable warm bath, I accompanied him to the theatre, which, although small, is neatly fitted up: yet there is a great defect in it, being so long and narrow that the voices of the performers are scarcely audible in the centre boxes; this, however, I soon found to be of very little consequence, the play itself being the very last thing attended to. The better part of the audience hire the boxes and the greater portion of the pit for the season, and attend every night in order to hold Tertulias, to talk, and to visit each other. The piece represented this evening was "La Italiana en Argel," and was well performed; some of the actors, old Spaniards, singing with much taste. The audience were quiet and well dressed, and although a light cloud

might here and there be seen to rise above the pit, or float in eddies from the gallery, I did not see one of the well-dressed ladies in the boxes indulging in the favourite and fragrant weed.

Sept. 30.—I rode out early in the forenoon with Mr. Exter by the charming Paséo of Las Vigas, which has on its left the canal leading from the Lake Chalco, alive with busy Indians pushing forward their laden canoes to the Mexican market: many of them were piled to a great height with vegetables, fruits, green forage for horses, wood, and crockery-ware: but I confess I looked in vain for the Arcadian groups which Mr. Bullock describes with his pen, and which his son has painted. On the opposite side of the crowded little stream are the Chinampas, which some people yet designate as Floating Gardens. These are long narrow strips of ground redeemed from the surrounding swamp, and intersected by small canals. They all appeared to abound in very fine vegetables, and lively foliaged poplars generally shadowed their extremities. The little gardens constructed on bushes or wooden rafts

no longer exist in the immediate vicinity of Mexico; but I learnt that some may yet be seen at Juchimilco, a place near San Augustin de las Cuévas. The Custom-house is placed at the entrance of the canal as it flows from Chalco to Mexico; and the revenues paid into it are said to be greater than those of any other place in the Republic, the market canoes being very carefully registered, and although not heavily taxed, their numbers with the quantity of articles they bring, contribute to make the returns very considerable. We rode at some distance on the southern side of the city across or along all the principal Paséos, which are numerous, broad, and finely shaded by double rows of trees. At length we reached Tacubaya, where I had entered, lying at a short distance to the westward, and visited the uninhabited palace of the bishop, which was undergoing a slovenly kind of repair for the reception of the Deputies from Panama. The building, erected shortly after the Conquest, is yet in excellent preservation, and the gardens would be fine if cleared of their wilderness of gigantic

weeds. Here I saw for the first time,—and I need scarcely say ate,—the delicious fruit named Perón, an apple grafted on the quince, and excelling in flavour even the celebrated New Town pippins of the United States. The cultivated grapes, pomegranates, guayavas, pears, and other fruits, abounded, and lay decaying on the ground. Nature had done every thing for the place, and the gardener enjoyed a sinecure, unless when called to exertion by the task of being showman to his neglected charge,—a labour for which he had the further inconvenience of being paid. We next rode to the immense and neglected palace of Chapultepec, built by the viceroy Galvez on a small isolated rocky hill, on which once stood a palace, and the harem of Montezuma. The lofty rooms are now all closed, the doors and window-shutters falling into decay. An air of utter desolation reigns throughout this once splendid building, from whence a view of the whole of the beautiful vale of Mexico is commanded. Beyond the western foot of the mound is an extensive space, inclosed with-

in walls, in which are yet standing the stupendous trees under whose shade the brown beauties of the Aztec monarch once wandered, concealed from the public gaze. Of these venerable trees, I scarcely observed one which exhibited the slightest symptom of decay; on the contrary, their clean healthy bark and branches, were it not for the immensity of their size, would lead to the supposition that they were of recent growth. The largest in this grove is fifty-two feet in circumference; and many of nearly that size are ranged in straight avenues, which they entirely overshadow. A white hoary lichen named, I believe, "Barba Española," and which is common on the large trees of this country, hangs like long waving locks from all the gigantic branches, and gives to these glorious trees a most indescribably majestic appearance. The Baron de Humboldt considers these "Ahüahüetes" as the *Cupressus disticha* Linn.* I heard here

* A small space at the foot of the rock Chapultepec has been prepared as a Botanic Garden. It is yet quite in its infancy, and some few plants had recently been placed there.

an extraordinary story of some poor people, who immediately preceded the present keepers of the palace. The family, consisting of a man, his wife, and children, lived in a little hut under the shade of the building; and the mother one day hearing a scream from her youngest child, which had been playing at the back of the house, found it in the jaws of a large wolf. The animal on being attacked by her, merely relinquished its hold to seize on another poor infant; and being driven from that also, it at last turned and seized on the mother herself. The husband, who was working below, hurried up on hearing the outcries of his wife, and instantly killed the animal; but in a few days the poor woman and her two children died of hydrophobia.—We returned to Mexico by the aqueduct of San Cosmo, equal in every respect to that of Tacubaya, and at the outskirts of the city waited on Mr. Ward, Chargé d'Affaires, whose house was really superb. In its extensive garden, amidst overhanging and flowering trees I saw the tomb of my much-lamented friend the Honour-

able Augustus Waldegrave, who unfortunately lost his life by an accident when on a shooting-party. We entered the city by the noble street of Tacuba, through which Cortez is said to have marched to his final conquest; and amidst the splendid houses, well-paved streets, and rattling of coaches, the imagination must be strong indeed, which can people the spot with thousands of poor Indians striking the last blow for their country, and strewing the conqueror's path with their devoted bodies.

October 1.—I this morning accompanied Mr. Holdsworth and Mr. Exter to the Hacienda del Cristo, a few miles to the N.W. of Mexico, forming a part of the immense purchase of Mr. Baring. This is a pretty, well cultivated spot, and has among other things a pulque plantation and a soap manufactory; and it is not a little blessed by its proximity to the church of Nuestra Señora de los Remedios, which is situated on a little hill at a league distance. This saint is one of the most important of the idols in the very prolific Mexican calendar: the image, which is very

small, and—with reverence be it spoken—noseless, was brought over at the time of the Conquest, by one of Cortez's soldiers, and on various occasions worked most extraordinary miracles in favour of the invaders, which of course obtained for it high veneration. This afterwards gave place to a deeper feeling, and it was adored after having been seen at Otumba to hover over the Spaniards while engaged with multitudes of Indians, and, to assist them in gaining the victory by "throwing sand" in the eyes of the savages! A chapel was now erected to the honour of Nuestra Señora de los Remedios; forms of prayer were established, and priests appointed; and the worship of Our Lady of the Remedies was added to that of the other idols of the Spaniards; until, having taken some disgust at its votaries, the image suddenly vanished, and years elapsed without any tidings of the offended saint. At length a blessed Indian, in chopping away the leaves of a maguey to prepare it for pulque, discovered the lost lady seated in the centre of the plant. She now suffered herself to

be restored to her worshipers, to whom she has ever since vouchsafed her presence. Happy indeed is the city of Mexico in the reconciliation; for without the aid of the idol, all the population would have expired of thirst, she possessing sovereign authority over the rains. The chapel of the saint is neat, and very richly endowed; she is enshrined in a box over the altar, bearing a crowned infant in her arms. Pictures of miracles in favour of her votaries are thickly suspended near the door; and even while we were in the sanctuary, three carriages full of ladies, who came to purchase masses of a sleek roguish-looking priest, drove up to the church; but we had not time to stay and see the ceremony. I have told a long story about Our Lady of the Remedies; but it may not be generally known that she once was of great prejudice to the interests of England, when Admiral Blak (Blake), having in the time of the tyrant "Cromwel" blockaded the treasure-ships destined for Havannah, was in consequence of national offerings and great humiliation of the

Viceroy and Court of Mexico, for many days and nights before the altar of the saint, visited with a gale of wind which blew him from the shore, and the galleons happily reached their destination. For this miracle, a splendid diamond ornament was presented to the image; and the whole story, with various others, is told in one of the most extraordinary books I ever saw, and which I have in my possession *.—I dined with Mr. Ward, and in the evening we drove to the Paséo, where some gaudy carriages were still rolling, and a troop of cavalry drawn up to keep order. We afterwards went to the theatre, where I saw, but heard little of, two farces, in one of which Prieto, the celebrated Madrid comedian, performed.

Oct. 2.—I visited the Universidad, in which an incipient museum of antiquities is forming, but as yet not opened to the public. The unfailing key,

* This modern publication, which is patronized by bishops and all the powers of the Church, is entitled "Lo Maximo en lo Minimo. La Portentosa Imagen de Nuestra Señora de los Remedios, Conquistadora y Patrona de la Imperial Ciudad de Mejico."

however, procured me admittance to the rooms, in which there was but little to interest, with the exception of some works in jade and obsidian. Of the latter is a large mask, well carved and proportioned, and exquisitely polished: and when it is remembered that the people who formed this, had no hard cutting instruments, and that the obsidian resembles glass in appearance although much harder in its substance, their ingenuity must be considered quite extraordinary *.

There were here a variety of figures of the rattle-snake, of various sizes, and chiefly of basalt; but all in the same posture, namely a compact coil, from which the head and rattle are somewhat elevated. With these were also a few mutilated figures of men and animals, and some fragments of little deities;

* From Don José Maria Bustamente I however heard of a still more wonderful production of Aztec skill, which he informed me was carried away by Humboldt. This was a large ring of obsidian perforated throughout its circle, so that a straw might be introduced at the only opening, and traversing the ring would come out again. With all the ingenuity of Europe, I know not how this wonderful ring could be imitated.

the whole inferior in number and variety to what I should have expected: but many more were on their road from the distant provinces; and I have no doubt but that the collection will ultimately become very interesting. In the court of the Universidad, stands Tolsa's celebrated bronze equestrian statue of Charles IV., which once stood on a lofty pedestal in the Plaza, opposite the palace and cathedral, and was the boast and ornament of the city. Being the effigy of a king, it was displaced and removed from view, and may be considered as lost to the public; who, I know not why, sometimes speak of it as the Caballo de Troya. (the Trojan Horse). In the corner of the same court-yard and behind a screen of planks are the statues of the goddess of war and some inferior idols, and the celebrated stone of sacrifice, (which by all accounts was never used for this purpose,) exhibited in somewhat embellished casts by Mr. Bullock. The great calendar stone is an admirable piece of workmanship, and is built into a wall of the cathedral, where its preservation may be en-

sued*; I was so fortunate as to procure excellent models in wax; of this, the goddess, and the stone of sacrifice; and would have also bespoken one of the monstrous serpent god which I saw in Piccadilly with the poor Indian victim peeping from its capacious throat; but the fact is, that the original statue is nowhere to be found, except in Mr. Bullock's exhibition. I was shown indeed a large serpent's head, but with closed jaws, and built as a corner-stone to a nobleman's house; but the body had never been heard of, and I was laughed at for my compassionate inquiries after the piteous-looking countenance which I in London saw sliding down the horrific gullet of the great snake.† I dined with Mr. O'Gorman, the Consul General, who is married to a Mexican

* According to the Baron de Humboldt in his *Monumens de l'Amerique*, this immense work of art weighs 12 tons 5 cwt. 80lbs. "Son poids actuel est encore de plus de quatre cent quatre-vingt-deux quintaux."

† In a convent there is said to exist a very small mutilated figure of this kind; but the original of the immense cast which was exhibited, certainly does not exist.

lady, and on my way to his house walked to the exercising-ground of the artillery, where I saw ten well mounted brass field-pieces, but attended by a singular-looking set of horse-artillery men; all indeed in uniform jackets, but in every variety of hats and trousers, chatting, smoking, and laughing very merrily in the rear of their respective guns. One jocose fellow did me the honour particularly to notice me, by an offensive speech in French, backed by about a dozen select words from the English vulgar tongue, which our soldiers and sailors seem to have taught to all the world. A general laugh was raised at my expense, until I walked up to the wit, and gravely taking hold of his bridle spoke thus to him: "When you know what it is to play the part (papél) of a soldier, you will learn not to speak in the ranks. Were I your officer, I should sentence you to a good flogging." A speech which had a strong effect both on officers and men, to whom I kissed my hand with a polite "adios."

Oct. 3.—My morning was occupied in the pur-

chase of the famed wax figures of Mexican costumes, after which I went to the Botanic Garden, occupying a small portion in the rear of the palace. It was small, crowded to excess, and lamentably neglected; but I was treated with the sight of two fine trees of the manito or hand plant (in the Mexican language "Macpalxochitl" Clavigero), which was once, and is even now, said to be in the distant provinces an object of Indian veneration *. I obtained three of the blood-red flowers, which somewhat resemble the dragon's claws on China ware, and have their *five* fingers

* The *Cheirostemon platanoides* exists, according to Professor Cervantes, in forests in Guatemala. In the magnificent work on the "*Plantes Equinoxiales*" of M. Bonpland, vol. i. plate 24. p. 82. it appears that in the year 1801, but one of these trees was known to exist in Mexico; "que cet arbre avoit sans doute été apporté par les Indiens de Toluca, qui conservent encore pour lui une grande vénération, et qui sont persuadés qu'il ne peut exister un second," &c. &c.

One of the trees which I now saw was about forty feet in height, the other perhaps thirty; and they were now, in October, in full bearing.—Since my return I find that specimens of this plant are growing in some of our English gardens. The largest is I believe that belonging to Messrs. Loddiges.

and little thumb terminated by points resembling claws. I ordered also a collection of seeds from the old gardener, who startled me by bringing a small tin box, and a large parcel of dried plants answering to the seeds within it, for which he asked the immense sum of three hundred dollars! I therefore gave him a more humble commission, which he forwarded to me at Real del Monte. After this we went to the Senate-house, which is also in the palace, and heard an animated attack on Esteva, the minister of Hacienda. The chamber is small, oval, and very prettily furnished, having a little gallery for visitors at either end, but ill situated for hearing. Every thing seemed well conducted, except that very strong language was unceremoniously made use of amongst the speakers. While the discussion was at its highest, the president all on a sudden gave notice that it was two o'clock,—silence immediately ensued—all the members moved off—and thus ended the day;—it being an established rule, that no Government affairs should ever keep these patriots from their

dinners and siestas, and that after the stated hour every man should be permitted to retire and recruit exhausted nature.

Oct. 4.—This was a memorable day for the Mexicans,—the anniversary of the first sitting of the Congress. At twilight, the park of artillery ranged in front of the palace aroused all the slumbering citizens. At dawn, flags waved triumphantly every where, and regiments of cavalry and infantry fired, manœuvred, and fired again, in the Plaza, for half the day. They then paraded the streets. Again the artillery was discharged: and in fact the whole time from sun-rise to sun-set was occupied by one-continued noise of guns, trumpets, and bands, sounding the eternal and monotonous "march of General Bravo." I dined with Mr. Manning, at whose house was a very pretty collection of Indian antiques, and here also met Mr. Bullock; who now finds how mistaken he was in the grand ideas he had formed of this country, and how much he has misled his countrymen in regard to the fertility of Mexico, against which and its

whole population he now rails most unmercifully. The principal charm of Mexico consists in the width and regularity of its streets, which cross at right angles, and in almost every instance traverse in one unbroken line the whole extent of the city; affording a fine perspective of nearly two miles, although the natives allow them a much greater length. They are all well paved, with pathways on each side, while through their centre, beneath a line of broad slabs, runs the common sewer. It is a far cleaner town than might be expected; well lighted, and now under a good police. Many of the houses are on a large or even magnificent scale, and the whole of those in the principal streets are fine buildings, but, as in many towns on the continent of Europe, the custom of letting the ground-floors as shops, stores, and manufactories is very prevalent even with those who possess the most splendid residences. There is one large inn, called the "Sociedad," which combines the characters of coffee-house and gambling depôt, and the Mesons are beyond description offensive

and incommodious. Cook-shops for others than Arrieros and Leperos are very scarce, and an absolute stranger would live worse in Mexico than the poor wretches who dive for their dinners in the regions of St. Giles. There are some warm and cold baths, which to all appearance are but rarely used, and abundant drinking-shops. The mercantile stores are well supplied, and numerous; but the greatest traffic among the common people is carried on in the Portales, of which there are several on an extensive scale. Here the stranger sees the most extraordinary variety of people and things, huddled into an apparently confused, yet well ordered mass. Several principal shops open to the Portales, and innumerable petty venders of both sexes also display their wares, crowded on tables, in boxes and in baskets; in frames, or spread on the ground. These consist of cutlery, mock jewellery, gaudy clothes, dolls, toys, wax-work, glass, china, shoes, books, and in fact, an infinite variety of things; while half-naked Leperos sleeping, overpowered by Pulque, or begging

of the passers-by; priests, monks, officers, Indians, ladies, and Europeans, form a continually moving motley crowd. At one turn may be met the water-carrier with an immense jar hanging at his back suspended by a broad leather belt from the head, while a smaller vessel hangs by another strap in front, to maintain the balance. In a different quarter is seen a stout Lepero bearing a chair slung from his head and shoulders, and in which is seated an old importunate beggar. On turning to avoid this object there is a chance of stumbling over the fruit and flowers of some poor quiet Indian woman, as she sits crouched against a pillar; while the ear is frequently saluted by the loud cries of the news-men, who sell in considerable quantities the publications of the day;—proclamations for or against the Gachupines (Spaniards), the Priests, the election of Deputies, or whatever may be the most agitating topic of the times. In a store under one of the Portales the English merchants have established an auction-mart, which is well attended, and is of great commercial

utility. In the Plaza, or great square, the principal objects of attention are the Cathedral, the Palace, and the Casa del Estado, built soon after the Conquest, and still, I believe, the property of the descendants of Cortez. The Cathedral, which is built on the site of the great Mexican temple, is spacious, dark, profusely ornamented, and very much resembling all the other churches of this country. The Palace is an immense building, comprising within it the residence of the President, the Senate-house and all the principal public offices. This and the cathedral occupy two sides of the square, and the others, with the exception of the space of the Casa del Estado, are composed of shops and dwelling-houses. Here it is that the Evangelistas (or ready writers) practise their vocation, as scribes to the public. I saw about a dozen of these men, seated in various nooks near the shop doors, occupied in penning letters from the dictation of their customers. Most of them, as might easily be perceived, were writing on different subjects: some treated of business;

while others again, as was evident by the transfixed hearts at the top of the paper, were transcribing the tender sentiments of the young men or women who were crouched down by their side. I looked over the shoulders of many of these useful scribes as they sat with their paper placed on a small board resting on their knees, and did not observe one who wrote a bad or illegible hand. The markets are good, but crowded and lamentably dirty; and I looked in vain for the magnificent originals of the fruits and vegetables which flourished so invitingly in Mr. Bullock's garden in Piccadilly. Still the fruits, flowers, and vegetables were good, although not by any means equal to what I expected. Every thing, however, is reasonable, and an amateur in fruit may revel to his heart's content in pines and other tempting things at very small expense. One peculiarity of the market is the quantity of little cookeries which are carried on along its borders, or mingled with other goods, each under its humble shed of mats or blankets. Beneath these, sit Indian or

Creole women grinding maize or making tortillas, frying all sorts of rank smelling and tasting messes, boiling frijoles or black beans, and selling pulque to the multitude; who squat down on their hams, place their little brown crockery bowl and their mess before them, and eat where they purchase their dinner. Here and there may be seen a strange wild-looking group earnestly playing at cards, or some game of chance; or a drunken man, and sometimes a woman also, extended at full-length on the ground. The Indians, so easily distinguishable by their features and their dark brown or blue woollen dresses, constitute the most active part of the crowd at these places; and numbers may constantly be seen bending beneath the weight of the produce of their gardens, which they bring on their backs, for many leagues, to dispose of at the markets. Their wives, although frequently bearing an infant at their back, also carry a little portion of the stock in trade, and walk quietly behind the men. They are a mild, silent, melancholy-looking people; by choice, habit, and

difference of language, cut off from those round them: but towards evening, when their goods are disposed of, a gleam of sunshine seems to light up their bronzed features; the pulque makes them talkative, and they leave the city for their humble villages, in groups,—laughing, chatting, and singing most merrily. Report speaks of a compact made between husbands and wives, that both should never be tipsy at the same time; so that the one whose turn of happiness is completed may be protected, and steered safely home by the other. About this, however, I am rather sceptical; for I have frequently seen man and wife equally pulquefied. In justice I must say that the greater proportion of Indians avoid drinking, and those who most indulge in it are old men and old women.

The Indians also bring in for sale little toys and baskets, executed with considerable neatness; and the Carboneros (or venders of charcoal) amuse themselves, while waiting for customers, by carving little figures of birds and other animals in the commodity they sell. The ingenuity indeed of

the lowest classes of people in Mexico is very remarkable, and is chiefly displayed in the construction of toys. The Leperos form pretty figures of soap, wax, pith of certain trees, of wood, bone, and other materials, many of which can be purchased, in a ramble amongst the Portales, for the smallest coin.

CHAPTER X.

Leave Mexico—Nuestra Señora de Guadalupe—her Legend—Lake of Tescuco—Chiconautla—Pachuca—Real del Monte—Cerro de los Pelados—Cerro de las Navajas—Ancient Arrowhead of Obsidian—Works at the Mines—Hacienda of Regla—Cascade of Regla.

October 5.—I LEFT Mexico * soon after noon for Real del Monte, accompanied part of the way by Mr. Exter and Mr. Holdsworth. We rode about two miles E. N. E. over a fine broad causeway, which brought us into the celebrated Sanctuary of Nuestra Señora de Guadalupe. It was too late to see the church without express permission of the

* Let me advise visitors to Mexico not to send their horses and mules to a Potrero, or pasture place, instead of keeping them at more expense in the stables of the Meson. My poor beasts after a week's pasturage, as it is called, returned to me so weak and thin as to be scarcely able to travel; and not having time to recover their flesh before I reached Xalapa, I was a loser of above a hundred dollars by my parsimony.

sacristan, who was at dinner; but when I preferred my request, he readily granted it, and sent a little boy to do the honours of the place. His first care on entering the church was to light a number of tapers in front of the curtain which hid the miraculous picture; and after a pause he carefully drew up the envious veil which shrouded the painting by a "Divine Hand" from the gaze of the careless or profane. As there was no priest present, I took advantage of a little ladder placed near the altar, to obtain a closer view of this wonderful production, which is coarsely painted on a closely-grained canvass * previously primed with a white ground. It represents the Virgin with clasped hands, and clothed in a blue cloak covered with gilt stars. Her petticoat is painted in red and gold; and she stands on a large crescent, which is supported by a very ugly little cherub. This pic-

* This, according to the Abbé Clavigero, is woven of the bark of the Palm called Icxotl, and which is seen in considerable quantities near Vera Cruz, at two leagues from the coast, where the natives call it "Palma de coco real."

ture is peculiar, as having rays diverging from the figure in all directions; and although the colours are faded, and the gold very dull from age and dust, the eyes of the faithful do not fail to see a dazzling and unearthly splendour in the dress and features. The story runs thus:—Soon after the Conquest, a poor *untutored* Indian named Juan Diego, while labouring near the foot of the rock Tepeyaca, where the Sanctuary now stands, suddenly heard a peal of music, and saw before him the Blessed Virgin in the attitude and habiliments of the present picture. The man was very naturally astonished; but more so when the Virgin commanded him to go to the bishop of Mexico, and desire him to build a chapel to her honour, on that very spot. The bishop, being a true Catholic, would not believe in heavenly apparitions; he therefore reproved poor Juan Diego for his credulity, and sent him away. Again the blessed Virgin appeared, and delivered a more positive command; but the bishop once more dismissed the messenger, with threats of punishment for at-

tempting to impose on so pure and undeceiving a religion as that so recently and mildly established in Mexico. The mortified Juan Diego again retired to the rock Tepeyaca, where for the third time he tremblingly saw Our Lady, who with some displeasure repeated her orders; to which the man replied by begging a sign for the unbelieving bishop. "Go," said the Blessed Mother of God, "go and climb the rock, and on its hitherto barren summit you will find a token; take it to the bishop, and he will believe." Juan obeyed: and although it was in the depth of winter, he found the once desolate spot covered with the most exquisite flowers in full bloom. Filling therefore his Serape, or wrapper, with the miraculous roses, he posted joyously to the bishop, who called a number of priests to witness the opening of the Serape;—when, lo! as the flowers fell from it to the ground, this identical picture which I saw was found imprinted on it by the hand of God! refulgent in beauty, and almost too bright to be gazed upon. Nothing more was now required to enforce conviction: a splendid church

was erected and endowed to the Patroness of Mexico; immense wealth was offered at her altar; and from that time every part of New Spain sent, and still does send her, annual tribute: and there is no town of note which has not a church open as a sanctuary for all criminals, and dedicated to Our Lady of Guadalupe. The first chapel was erected on the summit of the little hill of Tepeyaca, and has near it a singularly-shaped turret, so faced with masonry as to resemble a ship under sail. But as the fame and riches of the Virgin increased, it was thought fit to erect a larger temple to her honour; and the picture has been removed to the present church at the foot of the hill. This building is large and tawdry, with abundance of silver in balustrades, which from want of cleaning look like dirty pewter. Near this is a small chapel, erected over a wonderful and most blessed well of water, celebrated for the cure of all diseases, and sold at a cheap rate to the afflicted. It is inclosed by an iron railing, and is in custody of a reverend man, the appearance of whose nose would imply

that he rarely tasted any thing so mild as the fluid under his charge. He also sells to the devout, little books of the established prayers to the idol, together with small crosses, medals, and rosaries, which have touched her blessed figure; as well as certain strips of narrow red ribband, marked, and purporting to be the length of the Virgin's hands, arms, face, and feet.

From hence our road lay over a flat marshy plain, which had once evidently been covered by the lake, and the left of which for some distance was bounded by an abruptly rising chain of hills. A few miles to the eastward lay the great lake of Tescuco, glistening in the sun, and appearing to lie at the immediate base of the snow-capped volcanos of Popocatepetl and Iztaccihuatl *. A portion of the plain is crossed by a magnificent Spanish causeway, built with great strength, but now rarely used since the retiring of the waters by the Desague of Huéhuétoca. We passed on the eastern side, and towards even-

* Or, as I was informed, Estaguisiguatl.

ing entered amongst a number of picturesque little hamlets, surrounded by their plantations of maguey and wild tunas, and met a réqua of thirty donkeys, each bearing two skins filled with pulque for the Mexican market. All had bells round their necks, and were merrily complimented by my people as being honoured in their occupation above all other asses. We had ridden about six leagues when I stopped for the night at the hut of the Judge of San Tomas Chiconautla, a little hamlet scarcely seen to peep above its surrounding vegetation. Beyond this, the distant gleaming snows of the volcanos had a beautiful effect. I was lodged in a small room filled with hideous images, pictures, and frame-work for processions, all covered with black cobwebs, and which was never used as a dormitory by any of the family, out of respect for its exalted contents. I confess to having somewhat marvelled at being allowed to sleep in so sacred a place, overhearing my landlord ask my servants "what I could eat;—whether I partook of the dishes of the country; and if I

should be angry at his offering me salt; for knowing that I was not a Christian, and having heard that presenting salt was an insult to heretics, he was fearful of offending a man of such importance; for he saw I was carrying a most valuable cargo," taking my mineralogical specimens for a treasure of dollars.

Oct. 6.—We set out at daylight on a painfully cold morning, and with all the country covered by a hoar frost. The rising sun, however, soon dispelled it, and became very powerful; but the morning's cold still remained in the fruit of the tunas, through which we rode, and which were delightfully refreshing. There is a plant of the Tuna family called "Petaya" and "Organo" in the language of the country, which shoots up in long fluted stems covered with thorns, and many feet in height. It is abundant and gigantic at Bolaños, and in a Rancho through which we passed this day, the gardens and the roads were bounded by it, planted in the most perfect regularity, and forming exceedingly secure and beautiful fences.

It is a variety of the *Cactus Peruvianus*. A plant cultivated in our hot-houses, which much resembles it, acquires the height of a foot or two.

At sunset we reached Pachuca, having been twelve hours riding sixteen leagues with my poor starved cattle. At a few miles to the left of Pachuca, and amongst the mountains, arise some very remarkable steeple-shaped and isolated rocks, of a great size, and by all accounts of porphyry. They are best seen from the plain, about a league before reaching Pachuca. This pretty little mining Real lies sheltered in a nook at the foot of the range of mountains in which Real del Monte is situated; and I found a good Meson, where without much trouble a supper was provided; a circumstance well worth noting, as there is scarcely a Meson in the country, with the exception of those between Mexico and Vera Cruz, where food can be obtained: the tired servants are obliged to seek about the town or village for some woman, who will make a few tortillas or a dish of black beans, or perhaps slaughter and cook a tough hen.

Oct. 7.—Riding before my party up a rugged and steep ascent, I crossed the ridge of the mountain; and in three leagues reached Real del Monte, where I became the guest of Captain Vetch, first commissioner of the Company.

Oct. 8.—I set out on an excursion to the mountain of los Pelados, where the obsidian is found from which the Indians formerly made their knives, spears, and arrow-heads. Our road lay through the farm of Guajolote, the property of the Real del Monte Company, and situated amidst the beautiful forests from which the Real is supplied. Near this is one of the most magnificent spots of rock scenery I ever saw, called the "Piedras Cargadas" from the particular formation of several gigantic isolated columns of porphyry, which rear themselves on the opposite pine-clad side of a deep woody glen. Several are capped (or Cargada) by a large detached mass of rock, like the Logan-stone of Cornwall. The mountains divide on the right of these remarkable pillars, and the eye wanders far to the southward, over vast plains,

broken here and there by wooded barrancas, and bounded in the distance by a dark mountain ridge, beyond which again the volcanos of Mexico show the snowy part of their summits. I made a sketch of this, which very faintly describes the grandeur of the view. Passing Guajolote, which is four miles from the Real, and connected with it by excellent roads made by the Company, we rode into the thickets; and traversing all sorts of bewildering paths for two or three leagues, gained by a different ascent the summit of los Pelados. Here the trees have been cleared away, and a most extensive view is obtained, it being the highest point in the range, though Humboldt assigns a greater elevation to the remarkable rock, or Cerro de las Navajas, which lay beneath our feet. From this spot, as the day was remarkably clear, we enjoyed a view of the mountains surrounding the Valley of Mexico, with the picturesque volcanos. To the W.S.W. the Volcano of Toluca was distinctly pencilled against the sky; while to the eastward, Orizaba

and Perote reared their mighty summits above the dark and distant ridges at their feet. At the northern foot of the Cerro de los Pelados lies an immense chasm, or basin, in which the porphyritic rocks have assumed a columnar form, and which is evidently the irregular crater of a prodigious volcano. Dark pines and oaks add to the grandeur of the abyss; and its north-western ridge is still further embellished by three remarkable turret-shaped and detached mountains. To one of these, Humboldt has given the name of the "Cerro de las Navajas *," which more properly belongs to the spot on which we stood; although the obsidian is plentifully scattered over the surrounding hills and plains, the vein and the pits sunk on it by the Indians are on the summit of los Pelados. I know not if the workings have been deep; but at the present day they are nearly filled up, and only

* On this mountain, fragments of obsidian are found in great numbers of the form of arrow-heads and knife-blades, which have been fractured by the ancient inhabitants for use. These have given rise to the name of "Cerro de las Navajas, or Mountain of the Knives."

sufficiently hollowed to show their original forms, which were circular. Here we found several beautiful specimens of the Plateada, or silver-coated obsidian, with many other interesting varieties; and having laden ourselves with these, pursued another route homewards by the precipitous edge of the great crater, near which we were obliged to lead our horses, and round the foot of the Cerro de las Navajas.

Oct. 11.—An attack of dysentery, which since my exposure to the rains at Ozumatlan had been slowly increasing, now became so severe as to render it imprudent for me to go underground in the mines, where I must unavoidably have got wet; and finding myself for many days extremely weak, my excursions were confined to expeditions about the surface on horseback. In these I was enabled to visit the very extensive grass works and erections, many of which are on the same models and principles as are seen in the Cornish mines. The stores, workshops, foundry and offices, are of substantial masonry; and the shafts of every mine, as

well as these establishments, are inclosed within high well-built walls. The engine-houses were in rapid progress, and in that of Dolores the engine was nearly completed. A steam saw-mill was set at work during my stay at the Real; and the horizontal engine of Messrs. Taylor and Martineau, which had been pumping but a short time at Moran, had very nearly (and has since entirely) cleared the mine to the bottom. For the supply of the engine at Moran the timber is cut in abundance from the face of the steep mountain on which it stands; and the whole of the surrounding hills abound in wood, which with but little trouble and expense can be brought to the other engines also. Stamping engines to be worked by steam were erecting in the Real, and others to be worked by water were nearly completed at the New Hacienda of Sanchez, situated at the end of the valley about four miles to the northward. Dressing floors and other requisite preparations for crushing and washing the ores have here been prepared; stores and residences are built; and the whole establishment

is inclosed by walls, and almost hidden by the luxuriant vegetation around it. For the transport of building and other materials, light European carts have been introduced with great success, and excellent roads, blasted in many instances with great labour from the hard porphyry rocks, now traverse the extensive mining establishment in every direction. English tools are in great request; and in fact, were it not for the peculiarity of the stupendous scenery of the place, a visitor might almost imagine himself in England.

Real (or more properly Mineral) del Monte* is indeed a beautiful spot, and the valley or ravine, which extends about two miles to the northward of the town and two miles further to the New Hacienda of Sanchez, is most superb. The rapid mountain torrent tumbles through it over a rugged rocky channel, and from the banks to the summit of the steep mountains which closely

* The term "Real", or Royalty, was formerly applied to a mining district; but since the Revolution, the title of "Mineral" has been substituted for it.

hem it in, is an unbroken forest of the Ocote (or fir), the evergreen oak (of which nine varieties are met with in the district), and the "Oyamel." This lovely scenery continues until immediately beyond Sanchez, when it leaves the gorge of the mountains, and enters on the flatter yet still beautiful country. There is scarcely a spot in this extent but is worthy the pencil of the artist. The various tints of the rich foliage, the picturesque bridges, bold rocks, and well-peopled roads, blasted in the porphyritic rock, with the ever-varying curves and leaps of the stream, possess a novelty and charm seldom equalled.

It may not here be amiss to explain to my readers some of the very natural reasons for the ruinous state in which the generality of Mexican mines were found, and which do not apply to long neglected workings in England.—We will suppose the mine, for some cause or other, to be suddenly abandoned. Those levels which by constant care have from the time of their formation been kept clear of water, now receive it. If there is any soft

ground in them, great ruin must ensue. The periodical rains, which can be little understood by those who have never entered the tropics, carry vast quantities of earth, nay even large rocks, down the shafts, on whose upper edges a vegetation, of which many people can form no idea, is shooting up with all that wild luxuriance peculiar to the country. The Mexicans never boarded over the shafts, but left them quite unprotected. A small twig is seen hanging over the abyss:—in a year this assumes the form of a tree, and in a very few more, is one; its roots hang over the shaft; it detaches large masses of earth, and is at last swept into the pit to add to the other deposits. This may be the case with many trees and shrubs in rapid succession; and in a very few years a shaft is frequently filled almost to its mouth. The labour of our countrymen has in many instances been directed to clear these places again. The side earth is found to be loosened, the shaft in fact unsafe;—the slow, expensive operation of "timbering" therefore becomes requisite; some kind of ma-

chinery is necessary to hoist the earth and rocks from below; and after a great expense of time and money the workmen clear "down to water"—but it is water filled with rubbish. This water must be pumped out, or drawn by malacates and skin bags,—a double operation therefore goes on to clear out the water and earth. A level is arrived at:—this level must also be cleared. And so proceeds this arduous work, until the desired lode is reached. Proper allowances are seldom made by persons inexperienced in mining, for the time requisite for the accomplishment of clearing a mine that has been long neglected.

October 12.—On the 12th I rode out with Mr. Colquhoun to the farm of Ystula, belonging to the Company, situated about twelve miles from Real del Monte. Immediately after leaving the Barranca at Sanchez, we passed through the very pretty little village of Omitlan; and riding over plains covered with small Ranchos and maize-fields, arrived at Ystula, where about two thousand acres are under cultivation upon the English plan.

The ground is so laid out, that had not a solitary maguey plant occasionally made its appearance by the way-side, I should have imagined myself in England. The illusion was kept up by my seeing English ploughs, harrows, carts, and waggons. A small stream runs on each side of the estate; and every field can, if necessary, be irrigated. In fact, under existing circumstances, this farm is of considerable importance. Our farming implements are admired, and will be imitated: the method of preparing the land is approved by the natives; and the certainty that turnips may be sown and potatoes planted in a field instead of in little patches, has excited admiration amongst the Hacienderos near Ystula. In the afternoon we rode to the Hacienda of San Miguel, the country residence of the Conde de Regla, whom we found at home, and who was very kind and attentive, promising to meet us on the morrow at Regla. He was living in a ground-floor house, out of repair, ill furnished, and comfortless; the rooms all looking into a small square in the centre,—no advantage being

taken of a fine view, of which the Mexicans have less idea than perhaps any people in the world. The owners of the largest and finest Hacienda, yielding perhaps a revenue of 100,000 dollars, are content with apartments and provisions which an English gentleman would hesitate to offer to his servants.

October 13.—On the following morning we rode to Regla, about a mile N. W. of the farm, and entered the celebrated Hacienda de Plata, which is said to have cost 500,000*l.* sterling. It is now an immense ruin, crowded with monstrous arches of masonry, which appear as if they had been constructed to support the world; and I conceive that half the enormous sum which was expended in this place, has been thus consumed. Preparations of a more useful nature were now in forwardness amongst the mighty ruins; but nothing could relieve the air of desolation, which gave the Hacienda the appearance of a battered fortress. It lies deep in a precipitous Barranca, fenced in by the singularly fine basaltic cliffs, of which so much

has been said; and close above it is the celebrated Fall of Regla, of which Humboldt and other travellers have spoken in such exaggerated terms. The cascade is not above twenty-five feet in height; and whatever may be the swelling of the stream in the wet season, can scarcely at any time exceed it; since from its falling into a basin, the water below would rise nearly in the same proportion, and still leave the apparent volume about the same. The basaltic columns are remarkably regular; the left-hand cliff cannot be less than one hundred feet higher than the top of the fall, where the waters are fancifully divided by two pillars, which appear so much separated from their neighbours as to lead to a supposition that they will soon be entirely detached and broken. At this season the river was low, but flowed rapidly over a rugged bed of broken columns on its escape from the basin which first receives it, and which is almost overshadowed by beautiful trees. About three hundred yards lower, after sufficient water has been turned off for the supply of the machinery at the Hacienda, it is allowed to

escape over a paved sloping fall of considerable extent; and though we must dismiss the exaggerated ideas of the cascade, the ravine is one of the most beautiful and perfect basins of basalt in the world. The steep banks of the stream, which are composed of the debris of the overhanging columnar cliffs, are eminently picturesque; and amidst the blocks and broken basaltic pillars are flourishing luxuriant rock plants, unknown to Europeans; while on the precipice to the left hand climbs an immense plant of the "five-leaved vine," which fancifully covers the columns to a great extent with its bright scarlet and green leaves. In this sequestered spot the coyote and the racoon ramble fearlessly, and the rattle-snake delights to coil and bask itself on the tabular faces of the broken basalt. The Barranca in which Regla stands is of considerable extent; and at a short day's journey to the N. W., the pine, the sugar-cane, and all the fruits of the Tierra Caliente are cultivated by the Indians. On leaving Regla, we again returned to the Mineral. The town of Mi-

neral del Monte is small, and scattered irregularly on the hill side. It may contain about four thousand inhabitants,—who do not, however, by any means constitute the whole population of the district, huts being plentifully dispersed along the ravines. It has two churches, and a very tolerable Sunday's market. The dwellings are generally of Adobe*, and have sloping roofs covered with Tajamanil †. The natives are now quiet and well-behaved, although on the first arrival of the English there was a strong complaint against them: but I fully believe that an equal share of blame attached to many of our own artificers,—a race as strong in their prejudices and nationalites as the strangers with whom they were brought into association. This place in fact almost appears an English colony, from the number of our countrymen, the quantity of buildings erected after the Cornish models, and the use of carts, waggons, and tools of all descriptions. The height of this "Mineral" above the level of the sea, is according to Don José

* Sun-dried bricks. † Pine shingles.

Maria Bustamente, at the Parroquia (or church) 2758 metres*; the climate is cold, and sometimes raw amongst the mountains, affecting the lungs of new-comers, and causing shortness of breath after even slight exertion. I was weak and unwell during my stay at Real del Monte, and the effect continued longer with me than is usual. Others, however, experienced the same sensations, until they became accustomed to breathe the highly rarefied air; and I myself felt no inconvenience from it at the expiration of a week. Nothing is cultivated in the immediate Barranca, for which want of space may be considered as the only impediment.

* Highest point of the Veta Biscaina, 2891 metres. Moran shaft, 2575 metres. Pachuca, in the Plaza, 2431 metres.

CHAPTER XI.

Departure from Real del Monte—Zingalucan—Lake of Tecocomulco—Appan—Volcano of Malinchi—Buena Vista—Huamantla—Volcano of Orizaba—Guatepec—Barranca and Mines of Somalhuacan—Las Vigas—Xalapa—Plan del Rio—Puente del Rey—Paso de Ovejas—Manantial—Vera Cruz—San Juan de Ulua—Embark for England.

October 20.—I was now, although weak, sufficiently recovered to set out for the coast; and at half past ten in a misty cold rainy morning I started, accompanied by Mr. Exter, who had joined me that we might travel together to Xalapa. My friend Mr. Colquhoun had lent me his little "Dearborn" (a light American waggon), and as I had a merry postillion who piqued himself on his driving, all my bones appeared to be disjointed in about half an hour. In six gloomy leagues we reached the little village of Zingalucan, where (next to its only shop) we procured the best and most comfortable room in which I ever lodged in this country.

Oct. 21. Temp. 42° at noon.—The rain continued without intermission all this night and the day also: we could not therefore set out; but were consoled by a visit from Messrs. Colquhoun and Buchan, who passed the day with us, and advised our not attempting to proceed until the weather cleared, as the country before us was intersected by deep marshes and swamps. We were all miserably cold, but with the aid of a large pan of charcoal and some cigars contrived to comfort ourselves.

Oct. 22.—In the forenoon the weather cleared a little*: our visitors accompanied us for a short distance, and we pursued our journey, riding for a few miles amongst smooth-topped hills and undulating dales, which with their detached clusters of firs and oaks, have the appearance of our park scenery. Here we saw a towering pine which the

* The "wet season" had now ceased, at least the periodical fall of rain was no longer certain; but the elevated range of mountains in this part catching the first clouds as they fly from the seaward, are not unfrequently visited with showers combining mist and a small drizzling rain.

lightning had blasted in a remarkable manner, having first struck its topmost shoot, and then traversed the whole trunk to the very roots in the most regular spiral form, stripping off in its progress a groove of the bark of an equal breadth throughout, which gave the tree the appearance of an immense screw. We now entered on low swampy plains, deeply intersected by fissures and water-courses, and indented through their whole extent by the wheels of the waggons which had with so much labour carried the steam-engines to the Real, and which at this particular place met with great impediments. In four leagues from our outset we passed on the southern side of the Lake Tecocomulco, which at this season appeared narrow, shoal, and irregular, about five miles in length, and having its borders absolutely blackened with ducks, which we were in no disposition to shoot during the heavy rain. We wound round the foot of a low Sierra; and passing some rough rising ground thickly overspread with masses of lava and abounding in Tunas, descend-

ed to the plains of Appan, much flooded and having several shallow lakes. Here we passed a gloomy Hacienda, near which in one night twenty-one mules of the transport party employed in conveying machinery to the mines of Real del Monte, were swept away and drowned by a sudden fall of rain. Hence in a league we reached the ruinous and half-peopled mud city of Appan *, where we found a good meson for our animals, but very bad rooms for ourselves, although a kitchen fortunately made part of the establishment. We waited impatiently for our people and cargoes; but as they did not appear, we were obliged to sleep in our wet Serapes on a damp mud flood, abundantly stocked with very hungry fleas.

Oct. 23.—An accident to one of my mules and the escape of my loose horses into the woods had stopped our party, who now joined us, having suffered some slight damage. The animals having had no food all this time, required that we should

* An eight-league journey.

give them a day of rest; and we rambled in the mean while about Appan, which although but thinly inhabited and half in ruins, has lately been elevated from a village into a city. The church is large, and has a very peculiar and pretty steeple, unlike any I ever saw. The inhabitants of Appan were celebrated during the revolution for their activity in annoying the Spaniards and cutting off their convoys, which, as the town occupies a central position among the swampy plains, were obliged to pass that way. The gently rising hills are famous for their maguey plantations; and the pulque of Appan, said to give an annual revenue of 400,000 dollars to Mexico, is the most esteemed in the country. South of the town lies an extensive shallow lake abounding in ducks and gray geese, of which we purchased some from two extraordinary sportsmen, who passed on their way to the water, one mounted on a large black bull, and his companion on a cow of the same colour, both intended as "Stalkers." The knight of the bull was a merry and sufficiently pulquefied old man,

who, the morning being raw, was well wrapped up in his Serape (with an old long Spanish gun), which scarcely held together, crossed before him on the withers of his steed. The tips of the bull's horns were sawn off, and through the cartilage of his nose a long rope was passed by way of bridle. A coarse mat covered his back as a saddle, and a ragged sheep-skin above formed a soft seat for the rider. The only store that the veteran appeared to carry, besides his ammunition, was a large skin of pulque suspended from the horns over one side of the bull's curly head. The whole costume of the man and beast was so singular that I made a sketch of them, at which the old fellow was highly pleased.

Oct. 24.—Setting out at the earliest dawn we passed through several extensive fields of small ill-looking barley, which men and women were gathering. Before us lay the remarkable volcanic mountain of Malinchi*; its summit partially covered with snow, and the base enveloped in dense gray clouds, amongst which numerous little dark volcanic cones

* Called also the "Volcan" or "Cerro de Tlascala."

reared themselves around their mighty mother. As we advanced, the crops of barley improved in extent and appearance, and large tracts of the plain were covered with numerous herds of cattle. In four leagues we reached the Hacienda of Buena Ventura, where we made our breakfast on a log by the road side, as an excuse to drink of the pulque for which this place is deservedly celebrated. The Administrador very obligingly took us into the store of this national luxury, where we saw large square hides suspended by their four corners from strong posts, and containing the maguey juice in its various states of fermentation. The Hacienda derives from 4000 to 5000 dollars a year by the sale of pulque on the premises, to people who trade in it to Mexico. It is carried there in goat or sheep skins, each of which holds four or five Arobas *, and two constitute the cargo of an ass; this grave animal having the honour of carrying the favourite beverage, to the total exclusion of horses and mules. It is here sold at one dollar

* The Aroba is 25lbs.

for five Arobas; but in Mexico the price is higher, and a duty is paid on every ten Arobas. The usual time required here to perfect or ripen the pulque is twenty days; when all fermentation (which is kept up by frequent additions in the first few days) has ceased, and it is sufficiently strong to bewilder the brain. A league beyond Buena Vista lies the fine Hacienda of Sultepec, which belongs to the same proprietors. Passing along the plain of Buena Vista, and leaving a village of the same name on our left, in three leagues and a half we ascended a small rugged hill and passed through the village of Tlangatepec, where the "Colecturia," a large building, stands on the right of the rise, and the meson from its exterior promised but little internal comfort. Our road now lay across an uninteresting plain, over which a great number and variety of hawks were soaring in quest of a small burrowing animal of the marmot tribe, called "Tusa," which is very abundant; and, as well as the burrowing owl, a small mottled bird excavates the ground so extensively, that horses

will sometimes plunge knee-deep into the hollows. We also saw a few hares, and some quails of a very diminutive size. In one league and a half we passed the Hacienda of Ecatepec, beyond which a species of dwarf cypress becomes very prevalent in a country broken by masses of tufa, and deep ravines hollowed out by the rains. In two leagues, the ground became more even and grassy around the Hacienda of Piedras Negras; from whence, having Malinchi on our right, we passed through abrupt gulleys and ravines now dry and sandy, but in one of which a waggon of the Real del Monte transport party, containing thirty-six hundred weight of iron, was washed away by the rains; nine mules were drowned, and several men escaped with great difficulty. All the channels centre in a broad and flat sandy water-course, on one side of which we reached the Hacienda of San Diego, and lodged for the night in its meson.

Oct. 25.—As we rode out in the clear twilight, our attention was arrested by a loud chorus of voices, and passing the gates of the Hacienda we

saw sixty or seventy Indians, bareheaded and standing in a line, singing, not unharmoniously, the morning hymn to the Virgin. We remained uncovered by them while their chaunt continued, after which they entered the gates to commence their daily labour. The simple and sincere devotion of these poor people was far more imposing than all the gorgeous processions and church festivals, and it was impossible to hear this hymn without fully participating in their feelings. Beyond San Diego, the road enters on the deep sandy plains of Huamantla, a considerable town about a league to the southward, celebrated for thieves and for its extensive contraband trade in the tobacco of Orizaba. A number of Haciendas are scattered over the plains, and agriculture is much attended to. Daybreak afforded us a scene which I sketched, with a full consciousness of my inability to do it justice, but in the faint hope that some artist would fill up my slight outline. Malinchi, at whose foot we were travelling, lay to the southward of us, shrouded in a cold gray mist,

which at first obscured even its lofty peak; but long ere a clear light shone upon us, the first rays of the morning sun struck upon the extreme pinnacle of its snow-clad summit as it glistened like a star above the dark zone of clouds beneath; the wide sloping base lay in deep shade covered with black forests, while the more immediate land was clothed by large tracts of waving barley. To the west lay the conical offspring of the mountain, almost black with their woods and the intensity of shade; while in the extreme distance behind them Popocatepetl and Iztaccihuatl, clothed in their everlasting snows, shone like silver beneath the bright morning ray which at this early hour could alone strike on such lofty mountains. Heavy round clouds filled the east and hid Orizaba from our view, but the sight of it was not requisite to render the morning dawn the most glorious I ever beheld. E. S. E. from our outset we passed the small village of Guadalupe on a bare low hill, and all the surrounding country was entirely under cultivation as far as the eye could reach. This was the season of

harvest, when hundreds of men and women were occupied in reaping the extensive tracts of barley; while here and there large parties of people were busy ploughing. This operation is carried on differently from the English process, a small space at a time being completed by a number working close together. In the extent of about an acre I counted thirty-three ploughs at work, drawn by oxen, horses, mules, and asses. The soil here is dry and sandy, and the roads in consequence execrable. Water is procured only from deep wells, whence it is raised by a mule in a small malacate. We passed in their turns the Haciendas of Vasconcilla, San Juan Bautista, and San Francesco, which latter has a meson. While near this, the clouds which had filled the S. E. broke almost suddenly, and the volcano of Orizaba burst at once upon the sight, degrading in an instant the intervening mountains into insignificance. Three and a half sandy leagues further, we passed to the right of the Hacienda of Viréyes, where neither food nor lodging were to be had, and then entered on the

extremely level plain of Tepeagualco; in some places deep in clay, in consequence of the recent rains, and in others abundantly covered with the efflorescence of the muriate and carbonate of soda. The plain was dangerously excavated by tusas and owls, which with rattle-snakes are said to abound here, but the rawness of the day was unfavourable for seeing any of them on their rambles. The high isolated and picturesque cone of Pizarro terminates the view over the plain, and in four leagues and a half we reached its foot, to the left of which lies the town of Tepeagualco. We did not enter it; but having taken pulque and tortillas at a Rancho on the plain, passed round the southern foot of Pizarro, where pumice-stones of many varieties of colour, in large detached masses and extensive broken beds of tufa, are very abundant. In three leagues we passed the small Hacienda of Sta Gertrudes, from whence, although our animals were sadly tired, we determined on pushing for Guatepec, a Hacienda and depôt of the Real del Monte Company. Soon after leav-

ing Sta. Gertrudes, we passed several low ridges of lava and tufa, very slightly covered with Tunas and Yucca trees. It is a wild rugged spot, and celebrated as the favourite resort of robbers, particularly in the time of the celebrated Gomez *, a party of whose people murdered Mr. Crawfurd, an American gentleman travelling with Captain Murray of H. M. S. Valorous, and afterwards robbed and bound every one in company (1823). Long after dark, in three leagues we reached Guatepec, having travelled about twenty-two leagues and been fourteen hours on horseback.

* The enormities committed by this monster in human shape are scarcely to be paralleled in the histories of the most barbarous savages. He was, while chieftain of an unusually cruel band of robbers, invited to join the Spanish army during the Revolution; and accepting their service, distinguished himself by his bravery and ferocity: when affairs assuming a different aspect, he quitted the Royalists in order to engage in a more lucrative profession, by returning with augmented forces to his old occupation. He now robbed equally friends and foes, which last he chose to consider the now falling Spaniards, on whom he committed every refinement of cruelty, mutilating them in a manner too shocking to describe, and killing them by lingering torments. The Republicans,

Oct. 26.—The Hacienda of Guatepec is situated on the plains at the foot of Perote, which a clear morning enabled me to see with its remarkable "Cofré" to great advantage. This, as I learnt from a gentleman who ascended it, is a rock of about fifty feet in height, and so precipitous that it can only be climbed on one side and at considerable risk. Its similitude to a square chest has obtained it the name of Cofré. The mountain is clothed nearly to its summit by dark forests of firs; and its height, according to Humboldt, is

whose views he in some degree assisted, at length remonstrated with him on the cruelty of shedding so much blood,—to avoid which he buried his victims alive! and sometimes, to prolong the torment, with their heads just above ground!! When the Spaniards were driven out, all men became his prey, and he became master of the road from Mexico to Vera Cruz. At length, when his villanies had exceeded all bounds, he was taken prisoner, and as a punishment was exiled! to California, where he soon raised an army of Indians and desperate men; and when I was in Mexico news arrived that he was devastating the coast of Santa Fé, burning, robbing and murdering, and threatening an advance into the interior, which created great alarm; as, should he reach any of the wavering and discontented North-western provinces, and be joined by any large force, the country would be in danger.

13,416 feet, and 1260 feet more elevated than the Peak of Teneriffe. Having settled that my mules should go forward on the morrow to the village of Las Vigas, about five leagues to the eastward, I accompanied Mr. Exter on a visit to the Mines of Somalhuacan, which he directed for the "Mexican Company." In a league to the eastward we passed through the neat little village of Perote, about three quarters of a mile from the fort of the same name, in which is a military school, a manufactory of musquets, and a depôt of stores. It stands on an open plain, but could be easily approached, or at all events, its supplies, particularly of ammunition, which, oddly enough, is stored in two magazines near Gualtepec, could be cut off.

Turning to the north-east, we passed through the hamlet of Sierra Léone, and entered a forest of pines, where a cold thick mist bewildered us, until we found a boy who became our guide to the mines, by an Indian road even more precipitous and difficult, if possible, than the descent to the Corral at Madeira. We led our horses downwards for

four hours, the rain and fog rarely permitting a view of twenty yards in extent; yet we could easily observe how continually our narrow slippery path skirted the edge of precipices, or wound at the foot of immense basaltic columns, from which heavy cascades were tumbling into the abyss beneath. We could not have descended less than 3,000 feet, when we arrived at the depths of the Barranca, and crossed by rude alpine bridges over impetuous torrents, surrounded by the most luxuriant shrubs and trees. By a short path we reached the little village of Somalhuacan, of which, from the lateness and obscurity of the evening, we could see nothing, although as the night advanced the sky cleared, and a brilliant moon discovered to us that we were in a bowery valley closely hemmed in on all sides by immense precipitous mountains.

Oct. 27.—The following morning was delightfully clear, and we set out at an early hour to visit the establishments of the mines; which, though at this period in a backward state, can be easily

and not expensively extended to the greatest advantage. The copper, which is the chief production, has only been picked out in holes or burrows from the face of the dizzy cliffs, and is so abundant that the place may be aptly called "Virgin ground." The whole of these rocks abound in metals; and the little excavations made by those who have worked for gold, and the larger openings for the extraction of copper, appear from beneath like the aeries of so many sea-birds in the bold precipices above. Veins of gold have at times been found here, and have made the fortune of those who explored them: but the chief produce is in those coppers distinguished in Cornwall by the name of yellow ore. A quantity had already been smelted by the rude native process, and was said to contain a considerable "ley" of gold. Silver ore has also been found in small quantities, but of inferior quality, and has never been worked. We ascended by a hazardous path up an abrupt cliff to the mine of Santa Cruz, situated immediately above one of the torrents which rushes from the

mountains. Its wide rugged mouth opens to the precipice, and the workings go no further than a large chamber-like excavation, where the rich yellow ore, unmixed with foreign substances, is two varas in thickness.

The lode dips to the south, and, in common with the greater number of those in the barranca, runs across the valley from east to west. This place is but three-quarters of a mile from the village; and if attended to, may be of very great value. The present defect is, the insufficient means for transporting the ore to the Hacienda.—I next visited several other points at which works have been commenced, and all with equal promise: in fact, the metal is so abundant as to be seen cropping out of the rock even on the common pathways near "Santa Cruz," where also a very hard and heavy kind of iron-stone is to be found. The Barranca, without even excepting the Corral of Madeira, is one of the most magnificent objects I have ever seen. Abundant mountain streams fall into it in every direction, and two rapid rivers join in a common stream

near a Hacienda partially completed. One of these, which runs from the north-west, is impregnated with salt, and the other, rushing from the southward, is quite fresh. On joining, they run to the N.N.E. where the ravine opens and discovers a range of bold distant mountains. This in fact is the direction of the whole barranca, which is about half a mile in width. The village is small and ruinous, but will now speedily improve in comparison to what it formerly appears to have been, when prior to the revolution the metals were worked. Here the bounty of Nature, in the extreme luxuriance of its vegetable productions, vainly invites the lethargic peasant to bestow the most moderate portion of labour, which would bless him with abundance of delicious fruits and vegetables; yet, with the exception of a little maize and some pompions, I saw nothing under cultivation. The maize was the finest I had seen, having stalks fourteen feet in height, abundantly furnished with ears of grain (Helotes), in which, I was informed, a minute and very venomous snake is

sometimes found secreted. Here the delicious "Chiramoya" flourishes in a wild state; roses are absolutely a weed; and among some neglected peach-trees in full blossom I saw an immense orange-tree covered with fruit. Tobacco is an unregarded weed; the Tunas masas, an excellent fruit, is very abundant. Further down the warm barranca, the pure Indians, who are always more industrious than the half Creoles, cultivate with little labour all the tropical fruits, with the exception of the pine-apple; and the botanist who wades through the wild and almost too luxuriant vegetation which chokes the depth of the valley, will never regret the troubles of the descent to such a place. The breadth and freshness of the leaves is quite peculiar: that of the castor-oil plant acquires a great width; and the foliage of the two gigantic weeds named "Mala muger" and "Mal hombre," equals that of the Yam in size and brilliancy.

Notwithstanding the inviting appearance of the flowery wilderness at this place, it is a singular

fact that birds are seldom (indeed I was told, never,) seen so low down as the village of Somalhuacan, although a few hundred feet up the mountain they are found in as great abundance as elsewhere. The temperature being high, reptiles of every sort abound. The tarantula acquires an enormous size, and scorpions are very numerous. The surrounding mountains rise in a succession of ranges, of the grandest and most imposing forms, and there is scarcely one in sight from the valley which does not present columnar cliffs of basalt or porphyry, resting in many instances on strata of sand, limestone, or other minerals: the geologist, in an hour's walk, would be here enabled to form a most interesting and diversified collection. The mountains, notwithstanding their steepness and the boldness of their cliffs, are clothed with immense oaks, having forty or fifty feet of their straight trunks unincumbered by branches; by gigantic planes, beech, and sycamore trees, and superb towering pines. Having passed a morning I shall not easily forget, we took leave of

Mr. Exter, and began the ascent of the mountains by another path than that by which we descended. In many places the animals actually ascended by the trunks of trees, formed as steps, putting to proof the strength of eyes and nerves of those who ventured to look into the valley. As we slowly travelled upwards from the depths, the woods became enlivened by the bright blue jay; and we heard the shrill discordant cries of the large gaudy Lories, (called "Guacamalla" and "Papagayo,") which here abound.

Nothing could possibly exceed the magnificence of the ever-varying scenery through which we passed; and on reaching the summit, (S.W. by W. of the mines,) after two hours and a half severe labour to our horses, we espied to the northward, on an airy pinnacle about 2000 feet above Somalhuacan, a small village named Pueblo Nuevo, whose inhabitants are occupied in the culture of maize on the table land near them. We came out on an irregular plain, covered with tall thin pines, and enveloped, as on our descent, in a thick fog. In a

few miles ride we reached the high-road from Perote to Xalapa, near La Cruz Blanca, and soon crossed a small bridge over the stream of Rio Frio, at which the paved "Calzada" commences. It does not seem to have made one foot more progress since the time when seen by the Baron de Humboldt. We shortly after reached the village of Las Vigas, five leagues to the eastward of Perote, where I found my cargoes already arrived. On entering the village we saw a man carrying game-cocks to the Mexican market, each lodged in a separate round basket, and so arranged that no one bird could see his neighbour. The baskets were hung on two frames, each carrying twelve, and lashed at the top, so that the bearer walked beneath them, looking like a moving shed thatched with poultry. The houses of Las Vigas reminded me forcibly of the Swiss cottages, as they were entirely constructed of the trunks of pines, covered in by Tajamanil; and the general appearance of the long scattered village bespoke more comfort than I had been accustomed to see on the

road. A dense fog set in towards evening; and Las Vigas has the reputation of being seldom without one, from causes which Humboldt has so clearly demonstrated while speaking of Xalapa*.

Oct. 28.—We had a delightful morning; and a tremendously heavy bill from our host the Alcalde, who, pious man! was building a chapel at the cost of himself and his visitors. Three heavy waggons had stopped here, on their way from the coast to the mines of Tlalpuxahua; and after the confusion of harnessing nine kicking mules to each, I was much amused by the gravity of the "Tronco" (or wheel postillion) of that which led. He had been most vociferously abusive; but on mounting, devoutly signed the cross over the ears of his mules, saying, "En el nombre de Dios todo poderoso, que no nos hare daño, subo yo†." To this the "Guia"

* "Unfortunately, about 4264 feet is the mean height to which clouds ascend above the plains adjoining the sea, from which circumstance these temperate regions situated on the declivity (for instance, the environs of the city of Xalapa) are frequently enveloped in thick fogs."—Humboldt.

† "In the name of God, who is all-powerful, who will defend us from harm, I mount."

(or leader) replied, on swinging himself into his seat and crossing a countenance of a brassy hue from the recent effects of yellow fever, "Y yo en el nombre de San Francisco*,"—an invocation much more frequent than that to the Deity, who, as I have already remarked, is considered in a very secondary degree of veneration. We at length set out over the broad paved causeway which continues to Xalapa, enlivened by Indians, travellers, and immense requas of laden mules. For two leagues our road lay through a country covered with the black bubbled scoriæ of lava, bearing the usual name of "Mal Pays," and which, in the lapse of centuries, had acquired sufficient soil amongst its clefts to nourish a little wilderness of shrubs: amongst these the castor-oil plant was very flourishing. The Escoba bush, also abounding in Real del Monte, under so different a climate, is here very common. On approaching the Cerro de San Miguel, from whence in clear weather the sea may be discerned, we were sorry to observe

* "And I, in the name of St. Francis."

a dense range of clouds floating over the land in that direction; yet beneath them we could perceive the Tierra Caliente glowing in yellow radiance, far to the eastward. In four leagues from Las Vigas we passed through the little village of San Miguel; and in two leagues further, that of Bandarilla, enlivened by a party of men lassoing cattle on a little plain, and leading them off tied with a long rope, one to the tail of each patient horse. On one side of the road, a large and valuable heap of iron pumps and large machinery, of one of the mining companies, was lying, quite secure from plunder by their great weight; and on the other, was a house or shed full of wheels and lighter stores, apparently unguarded and at the mercy of every traveller. Half a league further, and about a mile to the left of the road, is the Hacienda of Lucas Martin, once a dépôt of the Real del Monte Company's stores. In another league, on entering Xalapa, I paid the "Piage," or turnpike duty, of two reals for each laden or saddled animal, and eight dollars for the waggon, after which we en-

tered the town; and in the "Callejon del diamante," the dirtiest and most disreputable street in the place, put up at the Meson kept by a man named Francesquini, and which, although not particularly sweet, and very expensive, possesses the merit of having regular waiters and good cookery, in addition to the most active and indefatigable race of fleas I ever encountered, even in the republic of Mexico.

Oct. 29.—I now became the daily guest of my kind friend Colonel Dashwood, Consul for Vera Cruz;—since, as I learnt by letters from the coast that no vessel was lying there, either for England or the United States, I saw no necessity for hastening to the Tierra Caliente, and braving the yellow fever.

Oct. 30.—With Colonel Dashwood as my guide I commenced my rambles about the beautiful environs of Xalapa; and we this morning strolled to the Chorro de San Pedro, a shady delicious dell, where we saw several women washing clothes in small tanks or basins, into which flowed clear little

streamlets trickling from the rising ground, which, with the dell and all the shady lanes round the city, was covered with closely embowering trees and clustering parasitic plants. Amongst these the broad light green foliage of the wild gourds, or chayotes, was the most abundant, and enlivened by clusters of bright scarlet and yellow flowers, with the deliciously fragrant tree-lily (called here Floricundio, or Lanternella). This is a large white bell-shaped flower, partaking in a softened degree the odour of the early blossoms of orange and lemon trees, which here acquire a great size, adding to the beauty and sweetness of the walks around Xalapa. These, with the broad shining leaves of the graceful Banana, springing amongst clusters of the dark-leaved wild Chiramoya, combined to form a natural garden, unequalled, or perhaps unexcelled, in the world. The wild berries and fruits attract several brilliant species of birds; and the delicate little "Chupa rosa*"

* Rose-sucker, or "Chupa myrta" (myrtle-sucker), by which names the humming-bird is distinguished.

delights to feast on the honey of an endless variety of ever-blooming flowers.

Oct. 31.—We set out at an early hour, while the sky was still clear of clouds, and before the volcanos were covered with their daily cap of clouds, to the hill of Macoul-tepec (Five-hills) which rises with an irregular summit to about 400 feet above the elevation, and on the north side, of Xalapa. The lanes leading to it were such as I have just described; and passing these by a steep ascent, we reached a small look-out house on the top, from whence a superb panoramic view of the surrounding country is obtained. I had determined on sketching this; but when I had once gazed from the summit of Macoul-tepec, I closed my book in despair of even conveying the slightest idea of its grandeur. To the east my future route over the Tierra Caliente was dimly seen through a glowing hazy atmosphere, the warmth of which was strongly contrasted by long spiral columns of white smoke rising in various directions, where the farmers were clearing their lands of the now

parched and useless vegetation. A faint line of light showed us the ocean beyond Vera Cruz, which is frequently so clearly seen that vessels can be distinguished under sail upon it; the direct distance being but twelve leagues, although twenty-six must be passed to reach it. Far to the southward, beyond a chain of steep dark cliffs bounding the Barrancas, each in itself a mountain, rose Orizaba, of which the extreme magnitude is better seen from this point than from any other; to the left, and nearer, is the mountain of Perote, opposing its sombre forests of pines to the pure white summit of its mighty neighbour. On the right of Perote we could trace the broad causeway leading to Mexico, and bounded on either side by cultivated or forest lands, neat white villages, and haciendas. In the north arise an abrupt chain of darkly wooded Sierras, intersected by deep chasms and precipices; amongst which, in the direction of the valley of Helotepec, is a lofty cascade, from this distance appearing like a white pillar reared against the precipice. The base of

Macoul-tepec is surrounded by fertile plains and gardens; and to the south, a pretty bird's eye view is obtained of Xalapa. On the hill top I found the common blackberry entwined round the Chiramoya, in company with many brilliant flowers, the cherished yet degenerated favourites of our English hot-houses.

November 1.—This was the "Festividad de todos los Santos," a grand feast-day; and the town in consequence was crowded with the natives of the neighbouring villages, in addition to its own gaily dressed multitude. In the morning the troops, preceded as usual by discordant trumpets, playing the never-to-be forgotten and eternal "Bravo's march," repaired to the church and heard mass; after which a merry bustle and confusion reigned throughout the day, and, contrary to the usual custom on religious festivals, Christianity was not outraged by a procession of the favourite and local idols. The market-place (Plaza del Mercado) was well supplied, and crowded with Indians, who, as in Mexico, were the chief traders;

displaying their stores spread on mats in the full glare of the sun. The best season for fruits had passed away, yet I saw pine-apples at a medio each; guayavas also of various kinds, large ill-flavoured citrons, fine oranges, limes, and lemons, bad woolly apples and pears; chirimoyas, grapes, ahuacates, sapote negro, plantains, bananas, walnuts, cocoa-nuts from Campeche, and the grenadilla *, a delicious pear-shaped fruit containing a substance like the pulp of a white gooseberry. Vegetables too were abundant, and good varieties of gourds and pumpkins, of which the chayote (a wild rough species) is excellent; green and dry peas and beans, haricots, large white-heart cabbages; the common potatoe, the red and yellow camote (a sweet species), turnips, carrots, gigantic tasteless radishes, several varieties of Chili peppers and tomatas; onions, leeks, garlic, parsley, sweet herbs, frijoles, ears of maize, dried tamarinds and pumpkin-seeds. A few individuals sold salted fish; the robalo (resembling our coal-fish) from Campèche;

* The pod of a passion-flower.

lisa, a small caplin from Vera Cruz; huevina, a fresh-water kind, and the librandia and parga mulato (a long dark skinned fish) from the salt lake of San Carlos near the sea-coast. Dried carp were also in the market, and our Newfoundland cod was not wanting. Dried meat, in the usual uninviting coils, was heaped here and there, and the nose was refreshed by the steams from the cooking establishments of a row of busy old females who were providing messes for the hungry multitude. On the opposite quarter from the savoury dépôts were others, displaying ranges of large tumblers filled to the brim with pulque, orgeat, spirits, and tepachi, an insipid composition of the juice of pine-apples, mixed with water and "panela," the coarsest brown sugar of the country. Besides these refreshments was another, obtainable every day from men who carried it through the streets in large tin pails. This was most excellent iced milk and lemonade, for which the snow is procured early in the year from Perote, and in the autumn from Orizaba. On one side of

the market was ranged a temporary double row of booths, for the sale of white and fancy-coloured wax tapers, which were abundantly purchased by all those good Christians who purposed honouring Todos los Santos by an illumination after night-fall. Small tables covered with neat white cloths and tasteful displays of confectionery, were placed at the corners of the streets, and had a pretty effect, with little gay coloured paper banners waving over the dogs, lambs, and nondescripts of painted sugar, which were always surrounded by gazing groups of open-mouthed children. Xalapa indeed is celebrated for its dulces (sweets); but notwithstanding this high character, the fruits are all preserved in such a superabundance of coarse sugar, that every sweet-meat has precisely the same flavour. On one side of the market-square is a small dirty portal, where all sorts of toys and trinkets are sold; and here I purchased a bamboo small-tooth comb for four reales, which had been brought across the country from Acapulco, where it had been received from China; there were

several of these for sale, and they are much esteemed by the country-people. I also laid in a stock of another article, called "sweet earth," which is eaten by women—why or wherefore, I could not learn. It is actually formed of a kind of clay kneaded into little cakes, or figures of animals, with a kind of wax which exudes from the Sapote tree. I purchased some of these articles, which are esteemed because the clay of which they are compounded had been dug at the place where Our Lady of Guadalupe appeared so miraculously to Juan Diego. The poor Indians, who sincerely adore this, the only Saint who has vouchsafed to show herself to one of their race, often eat the sacred earth, unmixed, upon the spot; and frequently mingle a lump of it with water, which they drink as a sovereign remedy against all ills. The meat, poultry, and game mart, of a very inferior description, is held in a regularly built square at a short distance from the other market, and inclosed by low walls, with seats, and an obelisk-shaped building in the centre. In this space the bull-fights are occasion-

ally held; and it was near the obelisk, that Mr. M^c^Kenzie, the late Consul, had a man shot at his side, by a bullet evidently intended for himself, and fired from the ranks of the troops which were under review on some public occasion. On this present day of jubilee, all the Xalapenses were in their holiday apparel; and in dress, features, and general appearance, I think them by far the best specimens of the Mexican people. A great proportion of the ladies still adhere to the simply beautiful black Spanish dress, with the graceful veil, or Mantilla; but where they have done other Europeans the honour of imitating them, it is a bungling piece of business, and all sorts of finery and tawdry ornaments are to be seen blended in happy confusion on the same person. In the evening the open windows admitted of my hearing, in almost every house, exceedingly inharmonious airs upon very bad harps, and singing, in a slow, monotonous, nasal tone, by one, two, or more voices, all in the same key. Xalapa, which is said to signify the "issue of the waters" (*de onde sale*

el agua), is one of the neatest and cleanest places I have seen in Mexico. Its streets are for the most part short, and somewhat irregular. This is rendered more apparent, by the situation of the town on some little hills. The houses, which are not remarkable on account of size, are for the most part of a superior order; roofed with red grooved tiles, well whitewashed and windowed without, and neatly furnished within; although the old Spanish precaution, of an iron grating at each window, gives them rather a gloomy appearance. The population consists of about 11,000 persons, and is very respectable; although not to be compared with what it was a few years since, when it was the custom of the rich Spanish merchants of Vera Cruz to retire to their country-houses in this charming spot *, during the sickly season on the coast. Xalapa is the seat of government for the State of Vera Cruz, and as such, is the residence of General Barragan, its governor. A garrison of about 1000

* Colonel Dashwood favoured me with a copy of his thermometrical register, of which I copy the mean temperature

men, cavalry and infantry, are constantly stationed in the town; but their barracks are in the suburbs.

The Xalapa washing has been much praised; and I can testify, at least, for its dearness, and the success of the women in thumping off all the shirt-buttons which remained after my seven months' campaign in the country. There are two public places set apart for washing; the largest, named Techacapa, has three long, roofed and commodious buildings, supported on pillars, and open in all directions. Through these, a stream of fine water runs continually on either side, at a convenient height for the washerwomen; and as the little canal is divided into compartments, one for the clothes, and another next it for the washing, it

of six months, which will give an idea of the great equality in the range of the thermometer:

	6 A.M.	Noon.	8 P.M.
May	69°	73°	71°
June	67	70	69
July	68	72	69
August	68	72	70
September	65	68	68
October	62	65	64

is very clean and comfortable. The second place, Jalitiquic, has but one house, at the foot of a little cliff, surrounded and shaded by fine orange and other picturesque trees.

I have already spoken of the markets, and but little remains to be said of the trade. Xalapa in the present day being merely a kind of resting-place between Vera Cruz and Mexico, with little commerce of its own, presents a striking contrast to the time when, under the Spanish Government, it was the emporium of the Atlantic trade. The Spanish merchants, protected by the exclusion of all foreign competitors, then sold at an exorbitant price the produce of Europe; and some of the most splendid fortunes realized in New Spain, owe their rise to the trade of Vera Cruz and Xalapa. The poor Indian now finds within his reach and his power of purchase, the luxuries and comforts which his poverty once denied him; and the abundance and cheapness of English linens, clothing, and ornaments, now leads the natives to perceive that there are other powerful nations, in addition

to that of their persecuting conquerors. Xalapa, however, possesses some very well-supplied shops, and is famous for its commerce in medicinal jalap, which is brought by the Indians from a Sierra near the foot of Perote, where the plant, of which it is the root, grows in great abundance. At this period it was selling at about three quartillos, (equal to four-pence halfpenny,) the pound. The Indians who bring in the roots, and who are also traders in fruits and vegetables, are a quiet, inoffensive, unobtrusive race; differing materially in dress and appearance from the aborigines of the Northern States.

The habit of the men consists of a dark blue woollen manufactured by themselves, and formed into a kind of tunic with broad open sleeves, and generally tied round the waist by a sash or cord. They wear no shirts: and the other clothing is simply a pair of short blue breeches, open at the knee. Straw hats are worn by all; and the back hair is suffered to hang wildly over the shoulders, while that in front is cut formally across the forehead.

The women wear a coarse cotton shift with broad open sleeves, and sometimes fancifully worked about the neck in bright-coloured worsted; petticoats drawn in numerous gathers round the waist, and very full below, of the blue woollen; and a blue or brown Reboso (or wrapper) of the same material over the shoulders. Their hair is divided into two long pigtails, generally interwoven with bright scarlet worsted; and it is the custom either to tie the extreme ends of these ornaments together, and let them hang down the back, or to bind them tightly round the head, which has a peculiar and rather pleasing effect. These poor people are a plain or even ugly race, and for the most part clumsily formed; which awkwardness of appearance is increased by the habit of walking with their toes turned in. The women work as constantly and laboriously as the men; and both sexes carry great burthens by the strength of the head and neck, from whence the loads are suspended by straps, so as to rest upon the loins, while the body is in a very stooping posture.

In Xalapa there are three churches. That of San Francisco, with its monastery, was one of the earliest erected after the Conquest, as an inscription mentions, by D. Luis de Alasco, in 1556. It is now sinking into decay; a long crack appears in the roof, and no efforts have been made to prevent its extending still further. The building itself is interesting, and the ancient carving of some of the shrines remarkable; particularly the figures of the Virgin, and some male saint dressed in the full Spanish costume of the time of the Conquest. There are now but three friars remaining, of the mendicant Franciscans, attached to the monastery; and their number, from the state of the times, is not likely to be speedily increased.

I was fortunate in making the acquaintance of one of these Padres, (an intelligent, worthy man,) who had travelled over the greater part of Mexico; was intimately acquainted with the peculiarities of its people, and well versed in the history of the revolution, particularly where Iturbide, to whom he was for some years chaplain, was concerned.

He was a self-taught, well-read man, and, moreover, the author of several pamphlets, of which he gave me copies of the last two, on subjects very different from each other. One was "Manifiesto sobre la Inutilidad de los Provinciales de las Religiones en esta America *;" the other, "Explicacion campesina sobre la Cria y Manejo de los Caballos †;" for, contrary to all order, he owned a wealthy Hacienda, and was particularly choice in the breed of his horses, of which I saw some very beautiful ones. The name and title of my friend was "El R. P. P. Fr. Juan Rosillo de Mier Cuautemoczin Frayle del Orden de San Francisco."

The Parroquial, which stands on one side of the Plaza del Mercado, must be considered as the principal church; and the simplicity of its internal ornaments and architecture is very striking. It is built on low arched aisles, and is also one of the

* "Manifesto on the Inutility of Provincial Clergy of various Religious Orders in this America."

† "A country Explanation of the Method of breeding and rearing Horses."

early edifices of the country. I walked in on a fast-day, when it was most fully and respectably attended; and at the door a kind of religious pedlar had erected his stand, from which he was selling, very successfully, little gaudy rosaries and crucifixes, and small lumps of blessed wax. San José is the third church; and there are two chapels, one of El Calvario, the other of Santiago. In addition to these regular establishments, there are two other religious houses: "El Beaterio," a female college, whence the young women are allowed to marry; and "San Ygnacio," which is now building as a penitentiary for both sexes, in separate establishments. Their admission and discharge are voluntary; but they are received only on the recommendation of the priests, who exact a fee for the permission. A Lancasterian school for 220 boys has recently been established; and there are two other boys' schools on the plan of the country, each to contain 100, under the protection of the Ayuntamiento. There is but one school for girls. It is to be hoped that educa-

tion will rapidly advance in this State; for the Congress has offered a salary of 2500 dollars for a master in Xalapa school, and 3000 dollars for one at Vera Cruz; and has issued also a general order, that every town in the State should establish a Lancasterian school, the master of which is to be paid by the municipality. There is, besides, some idea of instituting a reading-room and subscription library at Xalapa, after the example of Orizaba, which is, perhaps, the only town in the whole Republic where such an establishment exists; amusements of a literary nature not being as yet in vogue among the families here. Their only evening resource, except gaming and music, is, parading in whole groups through the streets, or on the most uninteresting spot near Xalapa, called "The Verros;" a low damp field, without a single charm to recommend it.—My impatience had now increased to the utmost, at being detained in consequence of no vessel being ready to sail from Vera Cruz. I determined, therefore, on going down to the coast, that I might

feel myself as near as possible to dear distant England.

Nov. 7.—Resisting the kind invitations of Colonel and Mrs. Dashwood to prolong my stay, I this day set out from the beautiful Xalapa. Passing out of the town by the "Calle de la preciosa Sangre de Christo *," which is inscribed in rude letters on the house whence the younger Mr. Bullock took his view of the town, we pursued our way over a broad paved causeway in a litera, (such as is common in Spain and Italy,) the most general conveyance between Xalapa and Vera Cruz. The body is mounted on two strong poles, secured in thick leather straps to the peculiarly shaped saddles of a pair of strong mules; the one in front is led by a man, mounted on a third mule on the off side; and the animal in the rear, as well as having its halter fastened to the back of the litera, is kept to its work by the whip of a driver, who has also charge of two or three loose beasts, the carriers being changed every four or five leagues. The

* Street of the precious Blood of Christ.

body of the vehicle is sufficiently long and broad for the traveller to stretch out on a small mattress, or to sit beneath the roof, which is supported on little pillars, and inclosed at pleasure by light curtains. The motion soon ceases to be unpleasant if the mules keep an equal ambling pace. Should one of them trot, the effect is above all things disagreeable to the traveller who has just entered on the Tierra Caliente, after a residence in the milder and more elevated regions. In three leagues, the thick wilderness of plants began to diminish; and on a bare space we stopped at "Encéro," which not long since was a dépôt for the transport stores of the Real del Monte Company. Here we breakfasted, and were joined by five other literas, conveying a native family to Vera Cruz. They travelled with most amusing pomp, monopolizing all the provisions and attention of the people at the little Mesons and shops on the road; noticing me occasionally by a condescending nod, as I was making my meals on what they refused, having heard that I was a poor

discharged miner from a broken Company, who was finding his way to England. Two leagues beyond Encéro is the Rancho of Coral Falso, where is a building resembling a signal-post. Here the Petaya or Organo began to appear amidst thickets of varied mimosas. The sugar-cane is cultivated not far from the road side, and oaks are no longer seen. The country very rapidly assumes a tropical character, and near Cerro Gordo slight bamboos begin to abound. The huts are formed of them, attached to light frames in the same manner as those at Tampico and the river Panuco. Heavy rain and a fresh breeze had taught me the discomforts of a litera under such circumstances; for the wet streaming curtains flapped continually in my face, and my bedding was completely soaked through. At four leagues and a half from Encéro, we stopped and dined at Plan del Rio, where a pretty bridge is erected across a small and at this time beautifully transparent river, running over a rocky bed through a picturesque Barranca, whose rich woods overhung

the stream on either side. On a rising woody knoll is a small square fortress commanding the dell, and which was used in the revolution. From El Plan we ascended to a good unpaved road; and with the exception of a short space, at the ascent of Calera, it continued with us to Puente del Rey, four leagues and a half further. To the southward of Calera, and at a short distance from the road are said to exist a number of Mexican idols, deposited there by the Indians on their conversion to Christianity. An old man who lives at the foot of Calera, and follows the occupation of a hunter, can, it is said, give information about them.

We reached Puente del Rey* by the light of a brilliant moon and stars, and I wandered out to look at this stupendous work of the Spaniards. It is a flat bridge, of the most perfect and solid masonry, paved with the greatest nicety, and being built at a bend of the river is slightly incurvated to suit the approaches. It crosses over a wild and deep

* Bridge of the King.

ravine, through which the rapid Rio Antigua (Old River) tumbles impetuously among rugged rocks, overhung by clusters of the fine shrubs and trees peculiar to the Tierra Caliente. I did not lament the absence of day-light in visiting this beautiful place, where the effect of the silvery moonlight on rock, wood, and stream, was infinitely grand and striking. To this picture may be added the six literas, planted on the road, as the bed-places of their employers, in front of a few scattered huts, all brightly illuminated and devoted to the sale of food and refreshments for travellers. At a short distance from the road were also to be seen long heaps of bales, and rows of mule-saddles of requas, thus far on their way to the capital; groups of muleteers, wild-looking but merry fellows, cooking their suppers by little fires on the ground; others drinking, singing, gambling, or flirting with the active shop-girls, who were all bustle in attending to their customers.

Nov. 8.—We moved over the fine bridge at four A.M. and found the road tolerably good for

mules, but almost impassable for carriages of any description until we reached Paso de Ovejas, where a small bridge crosses a stream running through a very pretty ravine. At about one mile and a half to the right of the road on the N. E. side of the valley, and a short walk from the Paso, some remains of an ancient Mexican city are still to be found *. At the Paso and in its vicinity the huts are thatched with the branches and leaves of a large species of Palm, called by the natives "Palma de Coso Real," and which I never observed in the Tierra Caliente near Tampico. This tree seldom acquires much trunk, but its graceful leaves are of an immense size, and it produces a cluster of round fruits, outwardly resembling green walnuts.

* These are situated on the edge of the plateau, above the valley of Paso de Ovejas, and are of considerable extent. All that remains are the traces of streets and inclosures, and an assemblage of pyramidical elevations of earth and stones of various sizes, some of them forty feet in height. The frail materials of which the houses were composed have entirely disappeared. My state of health did not allow me to visit this place, from which I understand the view to be magnificent.

The hard outer pulp adheres to a small stone containing a sweet white kernel, something resembling our garden root "rampion" in flavour. Thick underwood gives place in this neighbourhood to small patches of plains, devoted to the pasturage of brood mares and cattle, and the road becomes extremely bad on descending La Bajada de Toluma to a woody dell, from which rise a number of verdant table-topped mounds. In a shady hollow we passed over the pretty streamlet and bridge, called Talon, whence a very muddy road lay through a wilderness of palms and other graceful trees, of which we could only discern the tops, the trunks being entirely hidden by the thick clusters of wild gourds and the festoons of bright purple and pink convolvuluses. Large flights of parrots, the chichalaca, and various kinds of doves, whirled constantly past us in the shady road, where we enjoyed all the beauties of the Tierra Caliente without suffering from its oppressive heat. On a small open space we breakfasted at a few huts called Manantial, and then pursuing

our pleasing route, arrived at the huts of Santa Fé, so much abused by all travellers that arrive in Mexico who visit the capital and return by the same road. I feel it a charitable duty to this contemned place to say, that its comforts are fully equal to those afforded by some of the Villas (towns) in the Northern States. From hence to Vera Cruz is said to be three leagues; and we again plunged into the thickets, through muddy, bad, and flooded roads. In two leagues more we heard the breaking of the sea, and having emerged from our shade and wound round a large sand-hill, descended to the beach, on which a few huts, named Bengara, are situated. A strong norther was blowing, and a heavy surf broke along the line of coast, while the island castle of San Juan de Ulua and a cluster of shipping beneath its walls, with the city of Vera Cruz terminating the long yellow line of sand, formed an extremely pretty picture of about four miles in depth.—I had now traversed the much-condemned route between Vera Cruz and Mexico, by the way of Real del

Monte; and from experience can affirm that it is the most beautiful, most civilized, comfortable, and convenient route in the whole of the Mexican Republic. Let those who detract from it, take their next trip to the interior *viâ* Tampico and Zacatecas, and then, having made the comparison, give their opinion upon it.

We entered Vera Cruz in the afternoon; and while I was bribing the Custom-house officer from my Litera, not to detain me by opening my portmanteaus, one of the soldiers of the guard very deliberately unstrapped my cloak from a led horse and walked off with it; but I afterwards recovered my property, by the thief's offering to sell it to my own servant, who was on his way to make inquiries.

I was conducted by the Litera-men to a nasty Meson,—the worst in fact I had seen, which is saying a great deal; and reached a room without lock, key, or window, by paths which I shall not attempt to describe.

Nov. 9.—In the evening, however, my friends procured me, for the following day, a room in the

only inn I had hitherto met with, and in which was a coffee-room, a public table, and the first civilized comforts I had enjoyed out of a private house. I occupied my day in roaming about, and met at dinner at Mr. Welsh's my friend Captain Gosset of the Ferret, who had brought the mail.

Nov. 10.—My day was prefaced by the great luxury of a bathe in the sea, in a spot entirely protected from sharks. As the natives are not much addicted to ablutions of any kind, they are for the most part ignorant of the place. I therefore, for the information of those who visit Vera Cruz, think it but charity to give them notice that this valuable spot is within the reef, and immediately beyond the northern Baluarte, or battery, which flanks the city.

This morning I attended with several of our countrymen the funeral of a young gentleman who had just been carried off by the Vomito. He was buried amongst some bushes in an open space to the S. W. of the town, near the Campo Santo,

which could not, of course, afford repose to the body of a heretic, and gives indeed but little protection to those of the "true religion;"—a peep through the ruined door discovering hundreds of whitened skulls scattered at random upon the ground, while the usual troops of familiar carrion vultures roam undisturbed amidst the crumbling bones.

My earliest walk was generally to the Mole, where a stranger can never fail of being interested in watching the bustle and activity which prevails. Crowds of Negro porters are in constant motion, discharging and carrying the cargoes of boats to the Custom-house within the gates, where a noisy concourse of cart-men are scrambling and quarrelling for the chance of employment; their pay, as well as that of the porters, is very high, many of them earning five and six dollars in a day.

The carts for the conveyance of merchandize are on two wheels, with an enormous breadth of axle, which gives them a clumsy and remark-

able appearance. They are drawn by three mules abreast, the driver riding on the near one, which has longer traces than its fellows, so as to allow the man's right leg to hang before the end of the shaft.

Boats are as expensive as labour and carriage, and in fine weather lie on either side the Mole, from which a number of men and boys are constantly fishing, either with casting-nets or simple rods and lines. They are generally very successful; and amidst the varieties of fish which I saw taken, I remember the names of Mojarra, Rouco, Barbudo, and Xurél, none of which possessed any particular brilliancy of colour. I was not, in fact, so fortunate as to see any of those "gems" of the finny tribe, which I was led to suppose I should have found in great abundance.

I one morning saw about 150 Presidarios, or convicts, embarked from the Mole for Campeachy; and whether from knowing them to be culprits, or from their true appearance, I think I never saw a more villainous set of faces: and

as some of them were very ill-clothed, their bare arms, backs, and breasts, exhibited many scars of the knife-fights, which are so common with the class from which these prisoners had been taken.

I made some excursions entirely round the walls, which so completely and closely surround the town that the free circulation of air is impeded; and this must in a great measure increase, if not create, the pestilence which annually commits such havoc. The custom of leaving dead animals close to the walls has in a great degree been discontinued; yet some are at times found near the roadways, attended during the day by numbers of vultures, while at night their brother-scavengers the coyotes (or jackals) come in for the remnant of the feast, and their shrill yells and snarlings as they revel in a body may be heard to a great distance. The south-western corner of the town, at which the extensive barracks are situated, has suffered much from the attacks of the first insurgents who took the place from the Spaniards; and in return some batteries in that quarter have de-

stroyed a church, and a vast number of detached buildings. The defensive sea wall has been much battered by the shot of San Juan de Ulua; and two Baluartes, (or small round batteries,) at the extremes, are absolutely shattered to pieces. The Alameda, which is the only public walk, is a broad pavement to the southward of the town, and from the exposed state of the coast, or want of attention of the natives, is unshaded by a single tree. Here on Sundays and festivals the beauty and fashion of Vera Cruz, who dress very gaily, and for the most part as Europeans, are accustomed to assemble in great numbers.

About a mile to the southward of Vera Cruz is a marshy and verdant tract, for which no one has been just enough to give the place credit. The country is here in many places covered with a short sweet grass, sufficient for the support of a number of cattle, and bearing bushes and small trees of a healthy appearance.

The soil at this season was in most places swampy; and even in the parching heats of sum-

mer, water is said to abound. There are numerous spots in this green patch, on which excellent gardens could be established; and any industrious and enterprising man, proof against the Vomito, might easily rear more than sufficient vegetables for the supply of the city and shipping. A long irregular morass or lake, of small depth and in many places filled with tall rushes, lies immediately beyond the ground of which I speak, and in it were a party of men who hauled a small seine with considerable success, taking three kinds of fish; the Naquara, Guavina, and Xuile, as well as a remarkable species of fresh-water tortoise having three elevated longitudinal ridges on its upper shell. Of these amphibiæ there are other varieties, as well as a few small alligators; and great quantities of aquatic birds make the lake their occasional residence. On the water which flooded the shoaler parts of the morass, through which I waded with my gun, were large quantities of floating untenanted shells of the genera *Ampullaria* and *Planorbis*, and I looked in vain for one with an animal in it.

On the side of a lofty sand-hill to the southward of the swamp, are still to be seen the ruins of a fortress or castle, said to have been the residence of a certain Doña Beatriz, foundress of Vera Cruz *, and inhabited by her, until the city was completed.

The lake, which supplies the town by means of an aqueduct almost buried beneath the flat soil, is usually termed "The Laguna," or "Los Cocos," and its waters could easily be appropriated to irrigation on its banks. While roaming about this place, I was joined by an officer of the Ferret, who continued his search for game after I had returned homeward: but scarcely was I out of sight, when having fired at a bird he immediately heard a ball from amongst the tall rushes whiz past his head; and as he who shot it was not to be seen, this gentleman very prudently retired before a second attempt should be made upon his life. It is remarkable that on a former occasion, a companion of this same officer was fired at under similar circumstances.

* I have been unable to find the name of this lady in either Bernal Diaz, Clavigero, or Solis.

I was much pleased with the city, or, as it is now termed in all official documents, "The Heroic City" of Vera Cruz. Many of the houses are excellent; its streets are straight and spacious; and were it somewhat cleaner, and repaired from the devastating effects of the shot and shells of the castle, would be a magnificent place. The paving is very good, and every street has a raised footway on each side, of a convenient breadth and peculiar construction. A ledge of cut stones bounds the intended path, and the space between it and the houses is filled with a fine cement of lime, sand, and shells, which equals stone in hardness and durability, and even acquires a polish from the feet of passengers. Houses are extravagantly dear in their construction and rent, which last, for the better sort, is generally 3000 dollars per annum. The building of one of these is rarely accomplished under 100,000 dollars. This high price is owing to the scarcity of materials; the belt of sand which stretches between the city and the interior preventing the

transport of stone or bricks; every thing, therefore, must come from the seaward *. The principal article of construction is a porous white coral, which composes the numerous reefs off the coast, and is usually found in large rounded masses.

The houses of Vera Cruz are all flat-topped, and covered with cement; and however the streets may be neglected, they are kept studiously clean, as the receptacles for supplying rain-water to the tanks or Algibés with which every house of consequence is furnished, and which hold sufficient water for two or three years consumption. All the principal buildings have also a Mirador, or little watch turret, on their roofs, from which a good view is obtained and a fresher air inhaled. To these places the members of families resort in the cool of the evening; and the anxious merchant hence looks out upon the coming sail, which is announced by the bell of the church of San Francesco tolling

* A number of squared blocks, of a yard each, of a very compact sandstone, which were lying near the Mole for its repair, cost sixty dollars each.

five times, so that by this very judicious plan the news is published to all the town.

The Plaza of Vera Cruz is small and not remarkable. On two sides it has Portales;—to the east stands the Government-house, an old Moorish-looking building; and on the south is the Parroquial in a sad state of decay, but now undergoing some repairs. Its interior possesses nothing of interest beyond a ghastly figure of the Saviour, painted of a darker brown than any Indian, nay, almost black, with immensely long hair, and almost disgustingly battered and bloody. Great merit was formerly attached to this idol, but the Vera Cruzanos are now less credulous.

Off the S. E. corner of the Plaza is a neat little fountain *, at the entrance to the Plaza de Verduras, where a tolerable market is held, in which on every side I saw for the first time covered greengrocers' stalls. Cabbages are here sold by the

* It is generally supposed that Vera Cruz is almost destitute of water. This is not the case: it has abundance conveyed to it by an aqueduct from the Lagoon; but not being of a wholesome quality, rain-water is generally used.

half or quarter, and a whole one of good quality costs four reales *; a large onion a medio †; and every other article of life in the same proportion.

There are hospitals for the sick, which I did not visit, as the Vomito was still very prevalent, and deaths were frequent; and one or two declining establishments of friars. A theatre, somewhat smaller than any of those in our country villages, is in progress of erection, and the Vera Cruzanos promise to re-establish their city in its ancient splendour. The population by a recent census was 8000, to which may be added about 1000 soldiers. The Presidarios, or convicts, are not included in this computation, as they may justly be termed a fluctuating population, the poor wretches dying in great numbers from the effects of hard work, poor diet, and an unhealthy climate to which they are unaccustomed ‡.

The trade of Vera Cruz has of late retrograded most deplorably, owing to the excessive and inju-

* Equal to 2*s.* 3*d.* † About 3½*d.*

‡ They are usually from the internal provinces.

diciously imposed duties, which have obliged the principal mercantile houses to revoke their orders for shipment; so that the very means which the Mexican financiers have adopted in hopes of increasing the revenue, have most effectually and irremediably injured it.

Nov. 23.—Preparations which had long been making for the celebration of the first anniversary of the fall of the Castle of San Juan de Ulua were on this day put in force. Salutes from the ships and castle announced before daylight the joyful event, and processions and fire-works were not spared. The Plaza was occupied by a triumphal Temple of Victory, and an artificial Castle of Ulua was erected on the Mole, where it fell gloriously under a heavy fire of squibs and crackers. Poor General Barragan also formed part of the show, and paraded through all the streets bearing a silk flag, and attended by soldiers marching the balance step.

Nov. 26.—Illness prevented my attending at all the merry-makings, but I saw on the third and

last evening the closing scene:—"Vera Cruz Triunfante," the "Heroic City*" being personated by a young lady habited as a tragedy queen, supported on one side by General Barragan in full uniform, and on the other by a judge in a full suit of court mourning.

The car in which the pretty little Genius of Vera Cruz was to have passed through the streets having been very ill made, she was robbed of half the glory of her appearance, and obliged to walk, preceded by two slaves† who were liberated for the occasion, and dressed in white; these were flanked by two little puppet-show children, one personifying Mars, the other Mercury, but which gay personages with their bright tinsel ornaments were taken by some of the mob for San Pedro and San Francesco. A band of music led the van; and a double line of about two hundred weil-

* Literally so expressed in all public documents.

† I was not aware until this period that a single slave, or even permission to retain them, existed in the Republic of Mexico; but now learnt that there were some few in Vera Cruz.

dressed people attended with large lighted wax candles.

Thirteen thousand dollars were at this festival expended in fire-works and exhibitions; while a ruined mole, fallen batteries, unrepaired public buildings, and unpaid troops, bespoke the poverty of the State. But the good people of Vera Cruz, and in fact all Mexicans, dearly love a show; and I must confess are the best regulated and most orderly multitude on these occasions that I ever saw.

It is but natural and gratifying to a people who have so recently burst their fetters, to exceed a little in their demonstrations of joy; and if they had at this period been rather more humble in their accounts of these great doings, more credit would have attached to them *.

Nov. 30.—I drove in a "Volante †" to Mocam-

* The Gazettes teemed with nothing but the heroic actions of the natives, and their prowess in taking Ulua (which, had the garrison not been starved out, would never have surrendered); but above all, their military were compared, and said to be equal to the Guard of Napoleon in their brightest days, "or the scarcely less celebrated infantry of Prussia."

† This vehicle very much resembles the calèche of Malta,

bo Point, at which the weighty machinery of the Real del Monte Company was landed in so masterly a manner by Mr. Colquhoun of the Royal Artillery.

Mocambo lies about four miles to the southward of Vera Cruz, and is immediately opposite the Island of Sacrificios, which before the period of the Conquest was so celebrated for its temple and numerous idols, many of which have of late been discovered and sent to Mexico.

In the evening I was at an extremely well attended ball at the Government-house. The ladies were prettily dressed, and the gentlemen had paid much attention to their toilette. No smoking, by either ladies or gentlemen, was permitted in the ball-room, which was spacious, well lighted, and very neatly furnished; and the whole display was extremely pleasing.

Dec. 1.—By the kind permission of General Bar-

and is supported on two enormously large wheels, which are placed behind the body. It is drawn by three mules, on the same plan as the carts which I before described.

ragan I visited the castle of San Juan de Ulua, which is too well known for me to attempt a description of it. The shot from the batteries of Vera Cruz appear to have done it no injury; and its spacious works, immense water-tanks, and fine position, cannot be too much admired. The sea-approach is defended by several extensive reefs, but the inner side opposite the city has deep water; and large brass rings are fixed into the walls as moorings for men-of-war, which lie completely sheltered from the tremendous "Northers." The Mexican squadron commanded by Commodore Porter lay at this time under the walls, and consisted of a frigate of thirty-two guns, a twenty-four gun-brig, with two of eighteen, and some schooners.

Dec. 3.—On this day they moved to the Island of Sacrificios preparatory to a cruize.

A convoy of a million and a half of dollars having recently arrived from the interior, the merchant-vessels which had been waiting for freight had now received them, and on the morrow I was to sail, after having passed four anxious weeks at

Vera Cruz in waiting for a passage. During this period the "Nortes" had been frequent and heavy; but notwithstanding their character of purifying the air, the Vomito had by no means disappeared, and several deaths had occurred amongst Europeans, or natives from the interior, who, it is said, are more liable to this dreadful malady than foreigners. The temperature during the above time was, with the exception of three or four hours in the middle of the day, rather agreeable than otherwise. The average range of the thermometer was from 86° to 92°; but during the gales it usually fell to 75°, which was considered as cold by many of the long resident English, who astonished me by closing their doors and windows, and in many instances putting on warmer clothing.

Dec. 4.—On the 4th of December I embarked in the United States brig Brown; on the 23rd we reached New York; on the 24th I again sailed for England in the packet ship Panthea; and on the 14th of January was wrecked, in company with H.M.B. Nimrod, at Holyhead, in the tremendous

hurricane which blew on that day. Most providentially all hands were saved, after many anxious hours' exposure; and with some difficulty and considerable personal danger I saved the dispatches with which I had charged myself for Mr. Canning*. In four days more I was fortunate enough to recover the papers of the Real del Monte Company; with this my unpretending journal, and my drawings. Many papers and articles of value were lost, notwithstanding the unceasing exertions of many friends at Holyhead, whose hospitality and kindness can never be forgotten by me.

* To Captain Hugh Evans, harbour-master of Holyhead, I am deeply indebted for his humanity and gallantry in saving myself and some others by means of his boat, veered from the mole into the tremendous sea which was breaking over the ship.

CHAPTER XII.

General Account of the Inhabitants—Creoles—Rancheros or Vaqueros (Herdsmen)—Arrieros or Muleteers—Indians—State of Law—Laws relating to the Mines—Usual Food of the Labouring Classes—Character of the People of the Country—Dwellings—Manufactures—Amusements—Agriculture.

HAVING been eight months in the Republic of Mexico, it is almost requisite to offer some description of its inhabitants, who in many respects may be considered as a very remarkable race of people. The Creoles, or descendants of Europeans, are by their circumstances the most eminent persons in New Spain, and, with the exception of those engaged in active commerce, are an indolent, overbearing, haughty race, who, with the ignorance which the barbarous policy of Spain has entailed upon them, have preserved also the most profound contempt for the poor despised Indians; and in fact

for every one without their own particular pale. They are, with some bright and gifted exceptions (whom, were it proper, I could enumerate with the greatest pleasure), the least estimable people in the country; although, from the influx of strangers and intercourse with the old world generally, there is every reason to expect and hope for a material improvement. The establishment of schools will accomplish much towards this; but above all, the improvement and softening of manners will be proportioned to the proper estimation in which the women are held; and I am happy to say that they begin to assume their proper station in society. Their education is now better attended to; and the alliances which have been formed between some of our countrymen and young ladies of family must have the most beneficial results.

Smoking, gaming, and the want of proper attention to personal cleanliness, will soon disappear; and with a little humility (for there are few people in the world who have a better opinion of themselves), the Mexican gentry of the present day may

very speedily take intellectual precedence of their ancestors.

The rich picturesque costumes of both sexes are now growing into disrepute, and European fashions generally prevail in the principal cities.

The Rancheros or Vaqueros, who are a mixed race of Creole and Indian blood, may be considered as the yeomen of the country, and live in the extensive cattle-plains, or in the cultivated yet retired districts, content in their cabin of mud or stakes,—lively, brave, good-tempered, profoundly ignorant, and careless of every thing beyond their immediate occupations. The revolutionary war, which for a season called them from their retreats, has not a little disturbed the pastoral comforts of their life, and has but too frequently changed the quiet husbandman into a most barbarous and blood-thirsty soldier: but time will remedy this, and the Mexican farmers will probably return to their own peculiar pursuits with the advantage of a better and more enlightened age. There is an independence and fearlessness of man-

ner in the legitimate Ranchero, which is very imposing and pleasing; and as he sallies forth in the gray of the morning to review his herds of cattle, on his active little horse, and cased in his short leather jacket and boots, with the ready lasso at his saddle-bow, he presents the most pleasing picture of health and happiness. His frame is generally light, active, and sinewy *; and the poorness of his diet on Tortillas and an occasional lump of Tasajo or sun-dried beef, maintains him in a state of body capable of enduring great fatigue. His chief fault is a propensity to get very tipsy whenever it is in his power, but he is generally good-humoured; and the murderous broils so frequent in the towns are rarely heard of in the Ranchos or Haciendas. The wives and daughters of this class of people live a most retired life; and there is little variety in their occupations of grinding maize and making Tortillas, spinning and sometimes weaving; except on Sundays and religious festivals, when, attired

* Some, however, of the Vaqueros of the Tierra adentro are quite as tall and muscular figures as our Yorkshiremen.

in their gayest clothes, they walk, or are conveyed on the same horses with the men of the family, to the nearest church village, where having heard mass and purchased all which they required at the market, they join in the crowded and monotonous fandango peculiar to the country, and which frequently continues all night. The female costume consists of a white shirt with short sleeves, and petticoats very full below, thickly plaited above, which are tied tight immediately over the hips. In this article of dress the most gaudy colours are preferred; and even richly worked muslin and gaudy French silks have here and there found their way into the most retired parts of the country. They all use a kind of shawl or Reboso, which is invariably worn over the head, and covers the bust and shoulders. The hair is smoothly parted in front, and amongst the young women generally well kept. A passion for gaudy coloured shoes, which contrast oddly with the nut-brown ankles, is universal with old and young on great occasions; and I have seen whole bevies of girls

trudging barefoot to the merry-makings, and carrying their sky-blue or yellow shoes in their hands.

The Arrieros or Muleteers are an offset from the Rancheros: but their mode of life is very peculiar and enduring; since, in their constant journeyings, whether they travel in the burning low lands, or in the most elevated, cold, and misty regions of the great Cordillera, they rarely sleep under a roof; but, having cooked their very frugal meal near the cargo in their charge, they lie down amidst their mules' equipage, sheltered from the rain by a piece of coarse Petate or sacking. The mules meanwhile are sent out to pasture under the care of one of the party, who attends them throughout the night; and at day-break half-a-dozen Arrieros will commence, and in two hours saddle and securely load fifty or sixty of these useful animals. The proverbial honesty of the Mexican Arrieros is to the present day unimpaired; and, with but few exceptions, withstood the test of the late troubled times. Many of them pique themselves on their vocation, which is very frequently

hereditary; and men of extensive property will be found conveying merchandise through the country on their own mules. I confess that of all the natives of Mexico, the Arrieros are my favourites. I have always found them to be civil, nay courteous, obliging, cheerful, and perfectly honest: and their character in this latter respect may be estimated by the knowledge of the fact, that thousands and even millions of dollars have frequently been confided to their charge, which they in many instances have defended, at the hazard of their lives, against those bands of robbers which the local government have now succeeded in dispersing *. The constantly varying life of the Arrieros gives them an acuteness beyond that of others of their countrymen; and their knowledge of men and places instills a liberality of feeling which is very rare in New Spain.

* The system and division of labour among the Arrieros, their customs, and the laws by which they govern themselves, are remarkably well adapted to the occupation of this important and useful class.

The last on the list of society are the poor Indians,—a mild, enduring, and despised race of people, who with care are capable of receiving the best impressions. The memory of their former free state seems stamped upon their serious countenances; and when excited during the revolutionary war, their courage, passions and devotedness were very remarkable; as, under the guidance of their priests, they took up arms against their ancient oppressors. They for the most part lead a pastoral and retired life, cultivating the fruits in the mighty Barrancas, or assembling in little villages, where they manufacture cloth and various articles of earthenware, and rear poultry for the markets. They have preserved their race unmixed with Spanish blood, and but few even speak the Spanish language. In their commerce with the towns they are always to be seen in groups; and I do not ever remember to have seen a pure Indian walking with a white man. They differ somewhat in costume in each particular State; but the general habit is a short tunic, of dark brown or blue wool-

len, confined round the waist, with breeches of the same material;—a profusion of thick black hair spreads itself over the neck and shoulders. All wear black or straw hats; but few of them make use of shoes, supplying their place by a rude kind of sandal. The women wear the same coloured woollens as the men; but generally use a white shirt, fancifully ornamented round the neck with a border of coloured worsted, and a short kind of cloak, which, unlike that of the Creole females, is worn over the shoulders. The hair is usually divided into two large and long pigtails, having red or other coloured worsted interwoven with them, and the ends are frequently joined in a bow, so as to hang over the loins: some wear these tresses tightly bound round the head, which has a good effect, heightened occasionally by the addition of some simple wild flower. In stature the Indians are for the most part slightly formed, out-kneed, and of an ungraceful carriage; their features plain, or even ugly; and their complexion of a deep dingy brown. Their intellect has never hitherto

been fairly tried, but great docility to their instructors might be expected; as they look up with particular veneration to their priests, who sway them unboundedly by that religion which was introduced after the Conquest, and so modified to their prejudices and intellects as to resemble in many respects, as far as the blind worship of uncouth images is concerned, the idolatry of their ancestors.

It is, I believe, the general opinion that the Indian population is now rapidly decreasing; yet I could not find any thing to bear out this assertion. It is true that they are not numerous, and that hundreds of thousands were swept away by the cruelties formerly practised by their imperious masters; but the case has of late years been different. They live unmolested in their villages, are the gardeners of the country, supply the towns with vegetables and fruits, which do not require much cultivation, and are now likely to increase in numbers. They are usually very quiet, and live most frugally.

The different languages of the various tribes of Indians (of which some account is given by Humboldt) are confined to their own people, and not used by the other races of the inhabitants of the Republic. Very few of the Indians speak or understand more Spanish than is necessary for their trading transactions.

During the eventful scenes of a protracted revolutionary war, law and justice gave place to the dictates of the various leaders of the prevailing parties; and almost all trace of that distributive justice which was strictly attended to by the Spaniards, had disappeared when Mexico found itself free. The early congresses of the Republicans speedily discovered the tottering situation in which the nation still remained, and edicts were passed that the different States, now "free and sovereign" (*libre y soberano*), should form their own laws, for domestic safety, and to repress the wild disorganized manners which now prevailed. Each Senate therefore drew up a code of law, rather, in most instances, according

to the feelings of the framers, than adapted to the temper and character of the people of the State which they directed. In many, the penal code was so arranged that the graver crimes received the lightest punishments; in others,—Jalisco, for instance,—it was said to be founded on the penal code of England, and in this State trial by jury was instituted. Little advantage, however, was derived from this measure, as bribery to some members of this body, and the ignorance of the others, usually swayed their decisions, and justice was rarely dispensed.

The State of Mexico now stands pre-eminent as an example to the others: but none of those which I visited, with the exception of Vera Cruz, have as yet in any way imitated her. In the capital, crime of all description was three years since tacitly sanctioned by the apathy of the government; but many recent executions of murderers, and a strict police, have effected the most beneficial changes; and all classes of people are now protected; while the manners, feelings and ideas

of men living under a just restraint, have most materially improved.

The turbulence of the late troubled times is wearing away, and the State of Vera Cruz may be said to be almost equal to that of Mexico. In Valladolid the people are also orderly and well-behaved. In the more distant States, however, the progress of civilization has been slower; and although Guadalaxara, Zacatecas, San Luis Potosi, and Las Tamaulipas, have materially changed their general character, very much yet remains to be done; since, as long as murder and daring robberies incur the same trifling punishments as minor offences, the lower classes must long remain in the same state of barbarism.

One court of justice is however equally well supported throughout the whole civilized part of the Republic—that for the decision of questions relating to the mines. Under the government of the Spaniards there was a distinct Tribunal de Mineria, of which the supreme court was in the capital; but a branch was establish-

ed in the chief city of each mining State. The laws on this subject were well framed and well administered. The functions of this tribunal have now devolved upon the Governors of States, assisted by a council of the most experienced miners; and the ordinances themselves remain in full effect: so that the foreigners who are now working the Mexican mines can at all times appeal to the "laws of the Mineria," should their proceedings be in any way checked by the interference of their mining neighbours. Contested rights, "Desagues*," and the right of water or surface, are the points on which the disputes are usually hinged; and by the dictum of the tribunal the parties must abide.

The usual food of the labouring classes, throughout such States as I visited, is the thin cake of crushed maize, which I have described under the name of Tortilla: and it is remarkable that, notwithstanding the great abundance of cattle in many places, the traveller can rarely obtain meat in the little huts which he finds on his road. Chilis are

* Drainage.

eaten abundantly with the Tortillas, being stewed into a kind of sauce, into which the cakes are dipped. A few fowls are at times to be seen wandering near the cottages, or some pigs rambling through the village, and the flesh of these creatures furnishes a feast on holidays.

The infirm and aged country-people lead a quiet easy life, and occupy themselves in the midst of their families, by assisting in cooking their frugal meals, or spinning the woollen or cotton yarn for the manufacture of their very simple dresses. No instruction is given to the rising generation beyond that of rearing the boys to the pursuits of their fathers, and teaching the girls their domestic duties. The priests are usually too ignorant or too indolent to give any kind of education to their young parishioners; and a child which can repeat the ordinanzas of the Church, and quantities of orisons to the most popular saint, by rote like a parrot, is considered as being highly gifted. The husbandmen would willingly and gratefully receive advances for the instruction of themselves and fa-

milies; but in the thinly-peopled districts I know not how sufficient children could be collected to form a school. The infants are usually quiet, docile and intelligent, and, as far as I could observe, of excellent tempers.

There is a marked difference in regard to moral conduct between the dwellers in cities and the agricultural or pastoral people,—very much in favour of the latter. The poor industrious peasant, living amongst his mighty mountains, or tending the immense herds of cattle on the plains, possesses many excellent qualities, and is degraded by but few vices; while the white Creole of Mexico is the least estimable, in every respect, of the inhabitants of New Spain. The marriages amongst all classes, but particularly those of the poorer orders, are contracted at an early age; yet I rarely saw such large families of children as are to be met with in Europe. The duration of life is about the same as with us; and although at a much earlier period the persons of both sexes bear deep impressions of age, they are generally healthy, and

enjoy life free from many of those complaints to which Europeans are subjected in their declining years. Rheumatism is the chief scourge of the old, agues of the middle-aged; but on the whole, the labouring classes of Mexico may be considered as a very healthy race.

I met with but few cases of insanity amongst any classes of people, but saw several instances of idiotcy. The latter sufferers are permitted to ramble about, and are usually treated with great kindness, rarely being turned out of the houses which they enter*, and being regarded rather as objects of pity than derision.

I have so frequently spoken of the dwellings of the Mexicans in the course of my Journal, that I need not describe them further in this slight summary. An account of their dresses also may be collected from the same source.

The country-people weave in rude looms the stuffs in which they clothe themselves; and manufactories are not common in the populous towns

* I am speaking of villages.

and cities. At Puebla, however, there is an extensive manufacture of leather, and Queretaro may also be called a manufacturing town. All classes are rather dirty and slovenly than otherwise, although a love of glittering and fine clothing is inherent in them. Few ablutions are performed by the generality of people. In the cities great improvements are observable within the two or three last years; combs, razors, and *tooth-brushes* being much more in vogue than formerly; yet in the present day the Mexican gentleman rarely, if ever, shaves while travelling, and the ladies relinquish but slowly their favourite cigars.

The Mexican Spaniard is lively and fond of amusement. Religious festivals and fire-works are his delight; and the dances, although very ungraceful compared with those of the mother-country, are always well attended. The love of this amusement is more general amongst the peasantry, who frequently dance throughout the night, with a regard to order and decency which is very praiseworthy. Their musical instruments are small gui-

tars; fiddles, and harps, of their own making; and singing usually accompanies the favourite fandango tunes of the Xarabe. The amusements of the children are as amongst us: but as they grow up, the love of play is instilled into them by the example of their parents, and soon forms one of the most important and favourite occupations of their lives: in fact, gaming, smoking cigars, and riding on horseback in the Paséo, are the chief occupations of the men.

Of those States through which I travelled, Guadalaxara and Valladolid, with the western boundaries of the State of Mexico, are by far the most productive; and agriculture, even in its present improveable state, yields a certain and valuable revenue. Maize flourishes in all the varieties of the Mexican temperature; wheat and barley are cultivated on the extensive plains amidst the irregular Cordillera, and thrive most luxuriantly at elevations of from 6000 to 7000 feet. The fields are rarely inclosed in any way; and the cattle of the passing traveller not unfrequently make sad incursions amongst the young crops, if not carefully driven, as

they pass along the roads between the rising grain. The maize is cultivated in two ways. The first and most general, called "Taparado," is by sowing in ploughed fields, which are again turned over: the other, named "Tapapié," is when it is planted at regular intervals, a square vara apart, and pressed down by the foot of the husbandman*. I have seen far less standing wheat than barley, which latter occupies very extensive districts near the plains of Appan and in various other parts. The annual rains are in these places sufficient for its nourishment: but there are situations in which all the farinaceous grains require occasional irrigation; for which purpose a mountain-stream or a river is usually considered as indispensable †.

* In this method it is customary, on the crop acquiring a height of three or four feet, to turn up the earth between the lines by means of a light plough; and the hoe is rarely used except in the early stages of the young plants, which six or seven months suffice to bring to maturity. The sowing time is usually in May, June, or July.

† Grain reared by this process is distinguished by the affixture of the term *Riego*: as Mais de Riego; Cebada de Riego.

No manure of any kind is used for agricultural purposes, although it could in many instances be most effectually employed: yet such is the bounty of Nature, that the almost totally neglected crops are in many instances productive to a degree unknown in Europe.

I am unable to give any comparative proportion between our statute acre and the divisions of land in Mexico, which are purchased or hired by the number of Fanegas of grain they can receive in seed*. The nearest estimate, by an intelligent gentleman near Guadalaxara, is, that 30,000 square varas, or Spanish yards, will receive one Fanega of maize, which is sowed at about three grains to each corner of a square vara. The time of the harvest varies according to localities; but I saw barley in the sheaf near Appan, in October and November.

Near the little villages, peas, beans, (principally of the kind called Frijoli, similar to our black French beans,) varieties of Chilis or Capsicums

* The Fanega is a measure of capacity, and equal to 1·599 English bushels, or five fanegas equal to eight bushels.

and the Camotes or sweet potatoe, are cultivated; but coffee, cotton, indigo, Vanilla, (which at Vera Cruz was selling at 1000 pods for 150 dollars) and other valuable productions, are chiefly reared in Oaxaca and distant districts which I did not visit. The sugar-cane, fruits, and other products of the warmer climates, are to be found in the depths of the precipitous Barrancas. But I must confess that I saw but little profusion of cultivated flowers; and still less of fruits, of which so much is said, except in the principal towns or proceeding on their way to them,—fruit or vegetables being rarely procured in any of the villages.

In the States of Tamaulipas and San Luis I have before observed that cultivation is comparatively but little attended to, the plains being almost totally devoted to the pasturage of cattle.

The same may also be said of the State of Zacatecas, the barren wild districts of which are very remarkable, although it also contains many superb Haciendas. These in most instances, unless favoured by the vicinity of some stream, have a

dam (or Presa) of masonry thrown across the narrow part of some narrow dell or valley, in which a large tank of water is preserved from the rains for the irrigation of the farm in the dry season. Canals run from the Presa; and the supply passes through water-gates, which are constructed with considerable ingenuity.

All the agricultural implements are extremely rude, but the natives prefer them in most instances to those recently sent from England. At the farm of Ystula, the property of the Real del Monte Company and situated near the mines, our ploughs are much admired; and the facility of turning up the ground to a depth the Mexican plough cannot reach, the neatness of the distribution of the crops, and the very evident improvement in the produce of many fields, has already excited the astonishment and elicited the praises of the neighbouring farmers, wedded as they have been to their own particular customs. If they once begin to imitate, much will have been accomplished.

The Haciendas usually contain a little village,

inhabited by the labourers on the estate. The women are employed in making curd-cheeses, either for the benefit of the farm or their private consumption; but butter is rarely to be found, hogs'-lard being in most instances used in its place*. The milk indeed of the cows is not of that rich quality which would be requisite for this purpose; and the heat of the climate in many of the most flourishing cattle districts is too great to admit of butter becoming solid, except during the three or four winter months.

The mode of regulating rent is by the number of Fanegas which the land could receive. It is usually paid in money, not in produce.

The price of labour varies very considerably,

* The supply of this most important article of consumption is kept up by some Haciendas being almost exclusively devoted to the breeding and care of hogs, which are usually fed to a certain size in the open country, and then fattened on maize. The lard is also in great demand for the manufacture of soap, and extensive premises are usually fitted up on the farm with all the apparatus requisite for its manufacture.

according to the situation of Haciendas. On the cattle-farms the Vaqueros, Rancheros, or herdsmen, receive about five dollars a month. The husbandman, hired by the day or week, about seven-pence English *per diem*.

APPENDIX.

Appendix I.

Notes on the Bar of Tampico, and the River Panuco.

I entered the Gulf of Mexico in the month of March, when the Nortes * are supposed to have nearly ceased, or at all events to have so far diminished in violence as to be no longer objects of dread to any class of vessels. In our passage across from Cape San Antonio we experienced extremely fine weather; and having good observations, were enabled to ascertain the existence of the northerly current, which set us about ten miles a day.

We first struck soundings on approaching the Mexican coast in the parallel of Tampico, in 108 fathoms soft mud, when about thirty miles distant from the shore. At a distance of sixteen or eighteen miles we distinctly made out the land from the deck, although it was represented as being so low that vessels were close

* Violent gales of wind from the North, which are prevalent from November till March.

to the beach before it could be discovered. At this distance we had thirty fathoms water, still muddy bottom. Standing-in for the coast, the soundings diminished regularly, and at about eight miles distance we clearly distinguished the huts at La Barra, which, on a line of coast so completely unpeopled in every other part, are a sufficient mark for vessels making the port; and the captain who has once seen this part of the coast will always recognize it again without any difficulty. At five miles from the land we had ten fathoms, and running into six fathoms, at about two miles made the signal for a pilot, who soon came off in a launch*.

At this distance a continued surf appears to cross the mouth of the River Panuco, in consequence of the Northern point of the Bar overlying that to the Southward; but as the vessel stands-in, a clear passage is seen of about a cable's length across, although varying occasionally from the shifting of the sands of the Bar. The surf on either side is the guide to the pilots; and the depth of water being known, with a proper allowance for the almost continual ground swell, any captain might safely carry his vessel over without assistance; although by doing so he saves no pilotage, since this

* Since our arrival an opposition piloting firm have established themselves at the Bar; and vessels now find the launches on the look-out for them several miles from the land.

must always be paid. The best anchoring ground in the offing is E. by N. of the Bar, in ten fathoms water, although many vessels come into seven and eight; where, it must be observed, they are exposed to a heavier swell, and there would be more difficulty in hauling off the land in the event of bad weather setting in. From all I could learn, a vessel may trust to finding very regular soundings all along this part of the coast; and if, on approaching it, the lead is kept going in the night, no danger need be apprehended in standing-in for the land.

When I first crossed the Bar, our shoalest cast was nineteen feet and a half, the wind easterly. On my second passage over it, at the expiration of about ten days, there were only thirteen feet: and in the three last visits which I paid, I found but twelve. These observations were made as near the time of high water as a constantly varying flood from the river would enable me to judge, since the tides are here very inconsiderable at all times, their average rise and fall seldom exceeding two or three feet. At the time of the Periodical rains, however, the River Panuco becomes enormously swollen, and no estimate can be given of its ever-varying depth at the Bar. The whole distance between the *visible* points at the entrance is about half a mile; but the deepest channel at the time of my passing was scarcely a

cable's length across, and the actual bar little more than a cable's length over. On either side of it, as well to seaward as within the river, the water gradually deepens, although you sooner get into four fathoms water after crossing it than when standing out to sea; for in that direction the flat extends further, and at about one mile distance you have five fathoms. The marks for entering the river at the time of which I speak,—and it must always be remembered that the bar continually shifts,—were these. There are two high rude scaffoldings from which a look-out is kept to seaward; and these are called Miras. The first or outer Mira on with the larboard end of a long barn-like building, brings you into the fair way in four fathoms: you then run until the Mira is its own breadth *from* the barn, and at this moment have the shoalest water; at which time the second or inner Mira is the barn's breadth on the right of the barn. As these bearings shift, the Bar is passed. You may then hug either shore in four to three fathoms, as the wind may be blowing, to give sufficient room to round to and anchor abreast the centre of the little village of huts at La Barra. Before the establishment of an opposition pilot company, captains of vessels were liable to be much imposed upon: but perhaps it will now scarcely be requisite to give them a caution not to place too much confidence in the assertions of the pilots as

to the depth of water; as they formerly had, and perhaps on some occasions may still have, an interest in representing it as less than it really is. This is in order that the vessel may be anchored outside, and employment given to the launches in discharging sufficient of her cargo, at an enormous expense, to lighten her for crossing the Bar. A boat might always be sent to sound; and an officer of prudence need fear no accident in doing so in moderate weather, for in the event of the Bar being too rough for him, he could always retreat before he had advanced too far into the short and sometimes dangerously chopping sea which falls on it. Always bearing in mind, that *all the accidents which have happened to boats on the Bar of Tampico, have been while in the act of winding*, when the river current was setting out, and the sea breeze blowing in. The best time for crossing is early in the morning, when even canoes need fear nothing. The evening is sometimes as good also; but two hours on either side of noon are reported by some pilots as being the worst times. In calm weather vessels may warp in or out in perfect safety with good care and their own boats; but employing the pilot launches is very expensive, although the pilots are obliged, for their fees, to supply *one* launch free of any other expense. The visiting officer of the Customs comes on board at La Barra, and seals

down all the hatches and store-rooms, which are not opened again until the vessel is again visited on her anchoring off El Pueblo Nuevo de las Tamaulipas. It is therefore requisite that sufficient provisions and other necessaries for the ship's use should be taken out of the hold before crossing the Bar; and as the winds cannot always be depended on to carry the vessel up the river, at least a week's supply should be kept out. Some soldiers will also be put on-board, and they remain until the whole cargo is landed. It is not expected that these men should be provisioned; but it is always found politic to do so, as in that case they make themselves useful on-board. Nothing can be done by using rough language or in any way resisting the Custom-house officers at the Bar: some refreshments and attentions will do ten times better.

As soon as the vessel is secured, the captain must find his way to report himself to the commandant of Pueblo Viejo, or Old Tampico; and on application a soldier will accompany him as a guide. It will be requisite that he take with him a manifest of his cargo, and a list of his crew and passengers; but he need not *volunteer* to show his register or name the extent of his tonnage. As at this period (March 1826) an enormous duty is laid on all sealed letters, and four dollars on every newspaper introduced into the country, the Custom-house people

endeavour, as soon as they come on-board at the Bar, to ascertain if any such are on board. Captains should therefore be on their guard against the *civil* offers of these people, to be of assistance by carrying letters on shore, or in their inquiries for recent newspapers: for, once getting these in their possession, they do not give them up until the dues are paid. A gentleman not long before our arrival was thus obliged to pay seventy dollars for a bundle of newspapers, although I believe that there is no government order to impose thus on strangers.

The course of the river from La Barra to the turn of the first reach is S.W. by S. three miles; and vessels will carry good soundings all the way in four, five, and six fathoms; always giving the preference to the larboard shore. The course on rounding the point, off which you may keep about one cable's length, is then rather over by the larboard hand, to avoid a point which is seen to run from Tamaulipas, and which carries a steep shoal a considerable way out with it. Keeping some huts, which will be seen, at about one mile and a half to the S. by W. you are then in the fair way; and rather hugging the side on which they stand, you may then steer for the anchorage abreast of Tamaulipas, to which the vessels at anchor there will be a sufficient direction. Nothing need be apprehended from vessels grounding on either side of the river, as the

rise and fall is inconsiderable, and the bottom a soft mud.

The Custom-house at Tamaulipas closes at one P.M., and nothing can be done after that hour. The chief authorities live at Pueblo Viejo, which is three miles from Tamaulipas, and the way to it is by the huts at the Humo. One mile and a half S. E. by E. of the new town boats must land, or at all events go sufficiently near to the Humo to be examined by a Custom-house officer who is stationed there. The way thence is by a river 200 yards wide, and very shoal where it is broken by small islands. Strangers, who of course do not know the situation of the banks, must push for the first huts they see, and leaving their boat on the beach walk thence into the town. It should be understood by captains, that the towns of Pueblo Viejo and Tamaulipas are in different districts, and that in consequence a ship is not permitted to divide her cargo, but all must be landed at one place. For this, the new town affords by far the greatest facilities, and "permits" may thence be obtained for the opposite side. An enormous expense is attendant on landing a cargo by the boats of the country; and it is therefore advisable that vessels should bring a large long-boat with them for this purpose, as when her work is done she would always sell for double her original cost.

I may exemplify this by saying, that the Real del Monte Company's brig having crossed the Bar, was a saving of about 2000 dollars for launch hire; and having used her own new long-boat in discharging, was a further saving of 500 more. Labour is here very expensive.

The pilotage in and out is thirteen dollars and a half, which are not demanded until the vessel is about to sail, when the consignee settles with the pilots. For the above sum you are entitled, as I have already said, to one launch to assist you. There are three grades of launches, at thirty, thirty-five, and forty dollars; some one of which the pilots will generally endeavour to persuade captains to hire, as essentially requisite. Should it be impossible for a vessel to cross the Bar, she may anchor outside with the most perfect safety; for by taking proper precautions she will always have time to slip at the setting-in of a Norther, which will carry her directly off shore, and when it ceases she may regain her anchor.—A vessel consigned to G. Robertson, Esq., the American Consul, to whom I am indebted for much valuable information, was in this way blown from the shore twenty-two times in two months, before she could finally discharge her cargo.

The town of Pueblo Viejo is most incommodiously situated, as the passage to it is so shallow that laden boats cannot at all times reach it. In mercantile im-

portance it is ceding very fast to the new town, which already contains a large and rapidly increasing population, several good houses and excellent stores, the rent of which, however, is exorbitant.

Altamira, once the principal mercantile depôt, is now nearly forsaken, and has only a few of the poorer sort of huts inhabited, the chief part of its population having removed to Pueblo Nuevo. From this place a road for wheel-carriages has recently been made to the Bar and Altamira, which will facilitate commerce very materially.

In these remarks which I have drawn up for the assistance of traders to Tampico, it must always be remembered, that in all things concerning the Custom-house, I only write of March until May of 1826; for the regulations are so frequently and unaccountably altered, that perhaps not one of those of 1826 will be legal in 1827.

The navigation of the River Panuco, although practised for a vast number of years, has yet been but little known to captains of ships, neither have commercial men ever turned their attention to it. Those who have ascended, have never given any description of the river, and those living on its banks feel but little interest in exploring beyond their immediate neighbourhood. There are few rivers which meander more in their course than

those of Panuco and San Juan, (the name applied to the Panuco above Tampico,) and in an extent of 206 miles, which I traversed between Pueblo Nuevo and the Rancho of San Juan, there are no less than 216 reaches, of each of which I ascertained the bearings by compass. Three miles above Tamaulipas there are three entrances to the lake of Altamira navigable only for canoes, which prior to the building of Tamaulipas were constantly employed in transporting merchandise to Altamira, as the principal commercial town and dépôt. One of the entrances leads to a small river the Tamisi, whence the towns are supplied with fresh water by canoes which constantly trade in it. The river of Panuco is here about half a mile in width. On either side are scattered, at distant intervals, the huts of Rancheros, who are employed on the large cattle-farms which are established wherever the woods are sufficiently open to admit of the animals pasturing. The immediate banks of the river, however, are thickly clothed with timber, which at and above Panuco is frequently of great size:—the moral or fustic wood, ebony, log-wood, palo azul or blue dye-wood, the cedar, sarsaparilla, uli or India-rubber tree, and a vast number of other trees, of which as yet the names and qualities are not known to us; but which may prove to be similar to some of the valuable woods produced in other parts of America. The forests also abound in

wild limes and lemons, with a variety of other fruits, which can be easily procured. At the distance of eighty miles by water, and at about forty by land, stands the town of Panuco. This was once a place of very considerable trade, as a door to the interior; but the new town of Tamaulipas has robbed it of a great part of its commerce. Vessels, however, which can cross the Bar of Tampico *laden*, may always go up; although a week sometimes elapses before they can reach the town, owing to the number of opposite reaches and the very baffling winds. Outward-bound vessels very frequently go up the river for the fustic wood, which is supplied ready cut and barked at half a dollar the quintal. A trade is also kept up between this place and Campeachy in salt, for which there is a great demand at the Ranchos in order to the curing of the tasaja, or hung beef.

Panuco is an old and well known Indian town of the Guastecos. The land on either side of the river at this part is highly cultivated in maize, gourds, and melons; but it is annually inundated by the rise of the waters, which at times flood the streets of Panuco, although at the time I visited it the town appeared to stand on a bank at least thirty feet above the level of the river. Five miles above Panuco a stop is put to a further navigation of the river by vessels of burthen; as a bar, having at this season but four feet water on it, runs in-

mediately across from shore to shore. This bank is about a quarter of a mile over, after which the river again acquires in certain parts a depth of two or three fathoms. At a distance of forty-seven miles by water above Panuco is the small Indian village of Tanjuco, in which there is not a single white resident. By land the distance between these two places is but nine leagues; about twenty-seven English miles. At fifteen miles above Tanjuco is the junction of the rivers San Juan and Tamoin with that hitherto called the Panuco. The Tamoin is said to come from the westward, and is I believe supplied by the river Limon, and several smaller streams which are crossed on the journey from Tampico to San Luis. I know not how far the Tamoin may be navigable; but its tributaries are certainly not so, even for canoes, on account of the falls and shallows. At about three days or fifty miles from the junction of the Tamoin with the Panuco are warm sulphureous baths, to which the sick resort from the coast in great numbers. I followed the San Juan to the S.W. through abundance of turnings. At thirty-six miles above the junction, the small clear river Tempoal enters the San Juan from the eastward; and on passing this we soon after came to rapids and shoals, which much impede laden canoes in their ascent, as they run considerable risk from the rush of water over the stony banks,

on which lie grounded large trunks of trees, forming very dangerous eddies. At this height up the river the difficulties are too numerous for people to trust merchandise in canoes: and the highest point to which laden boats might be sent is Tanquichi, eighty-seven miles above Panuco. The roads here are very good, and are said to continue so in its neighbourhood, to various parts of the country. There is however so little commerce to this place at present, that cargo-mules seldom arrive there, although there is little doubt but that they might be procured by a previous order, should this line of route at any time be adopted. In my opinion nothing would be saved, either in expense or time, by sending goods up the river in boats, as they would be many days in reaching the point of which I speak, and the usual pace of cargo-mules from Tampico would perhaps outstrip them. The labour of canoe-men, and hire of their boats, is very dear; and after all, the Arrieros would without doubt charge high for bringing their mules out of the usual route. Thus in my opinion the river can never be of the slightest use to us, until towns, roads, and establishments are placed at the highest navigable points, which is not likely to be the case for very many years. To ascend again from Tanquichi to the Rancho of San Juan, (which is the extreme point I visited, and 206 miles from Tamaulipas,) canoes should

only be half-laden at this season, as the rapids above Tanquichi are very frequent and impetuous; but heavier boats or rafts might descend the river with far less difficulty.

San Juan and Tanquichi are twenty-four miles apart by water, and from the former place it has never been the custom to forward goods: I could therefore gain no information as to the probable time of their transport to San Luis. The few people who had travelled on that road varied much in their accounts; but I should fix the time for a cargo at sixteen days. San Juan is a small beautifully situated Rancho, containing about a hundred inhabitants. The river above this passes to Miraflores, about eighty miles higher, where there is an American establishment, with saw-mills for cutting cedar. Hence the river comes from Tamasinchali, where it assumes the name of Moctezuma, and its source is from the lakes, by the "desague" of Huehuetoca near the capital of Mexico.

Of the Bar of Tampico.

The greater part of the eastern coast, in the centre of the Gulf of Mexico, trends nearly N.N.W. and S.S.E. for many hundred miles; and a continual surf, varying in its strength according to circumstances, breaks along the shore for the whole of that extent. This is known to increase tremendously in violence during the preva-

lence of the Nortes, or northerly gales, which blow with great frequency and impetuosity from the months of November until March.

As the direction of these furious winds is immediately along the coast, they necessarily bring with them an additional set of current near the shore, although it has, I believe, been ascertained by vessels well in the offing, that there is a strong set of *northerly* current during the gales. The in-shore stream passing to the south, necessarily offers an opposition to any cross sets, as from the rivers of Sotto La Marina, La Barra Ciega, Tampico and Alvarado, which places all have Bars of a variety of depths, and said to shift according to the prevalence of the Northers during their appointed season. The impediments which the outsets of these rivers present to the passage of the southern current must, it is evident, offer sufficient check to cause the deposit of the sands it carries with it, of course, on that side where it first receives the opposition.

That the Bar of Tampico owes its origin to circumstances of this nature is very fully proved by the constant shifting of its sands, and the situation of the low shoal points which form the entrance of the river. That to the northward bears evident marks of being more under the influence of the prevailing current than the other, from its superior elevation, and above all from

the immense quantity of drift wood which lies closely blended with the sands and broken shells of which it is composed, while the southern shoal, at the season of which I speak, had not a single stick upon it.

The encroachment of the northern point upon the sea is also very remarkable, and is proved by the half visible wreck of a schooner, which was lost on it nearly two years since, and which is now above two hundred yards from the line of surf. Masses of madreporite, corals and pumice-stones are also found in great quantities here, while on the south side they are very rare. I mention these facts as showing the great facilities which offer themselves for constructing a durable bulwark for the entrance of this small but increasingly important mercantile harbour; since it appears to me from repeated observations, that with the simple assistance of stakes and wattles, well placed and driven into the sand in the calm months, the first Norther in the blowing season would have the effect of raising a bank against them; and fresh piles might be thus added and continued to seaward, until a firm point should be formed, where now is a long shoal of a mile in extent, on which the sea constantly breaks, and which off its outer end in the blue water, has but two fathoms water. I do not mean to affirm that any additional depth would be secured to the centre of the Bar by these means; but I conceive

that a more equal and secure channel might be thus obtained, and its variations from nineteen to eight feet avoided, leaving perhaps an intermediate depth sufficient to permit the constant entrance of vessels drawing twelve feet water, or perhaps more. The current of the Panuco is not so strong as to stop the influx of the tides, although it offers a considerable check to them; and as its course on passing the bar rather inclines to the south-eastward, a natural current might in all probability be formed, if the river were unimpeded in its outset by the heavy seas which roll along the coast. The latitude of the north point of the Bar is 22° 16′N., and its longitude, from repeated observations by chronometer, confirmed by comparison with the observations on board H.M.S. Tweed, is 97° 43′ W.

Appendix II.

Notes on the Process of Amalgamation at the Hacienda of La Sauceda, Veta Grande, Zacatecas.

The ore after being raised from the mine and broken on the *Patio*, or Dressing-floor, at the Veta Grande, is weighed and put into leather bags. These are carried by asses, each of which is laden with a carga of twelve arobas, or 300lbs., to the Hacienda, under the charge of a careful confidential person and several drivers, whose exclusive duty it is to attend to the safe-conduct of the metal. The cargas are all delivered into the Hacienda, with a list of their number and qualities: and the first process to which the ores are subjected, is that of the

Molinos, or Stamps.

These in principle very much resemble the stamps used in the tin mines in Cornwall, although inferior to them in power, neither falling with such weight nor crushing the ore so completely. They are worked by mules; and the ore is constantly supplied by three lads, who take it from the heap between two pieces of hollow board or horn, and throw it beneath the stamps. As the ore is crushed it falls through small holes of the

size of peas, which are perforated in strong hides stretched on a slope on either side the machine, placed immediately over a pit which receives the *Granza*, or fine ore, and is entered by a small flight of steps.

There are seven Molinos at the Hacienda, six of which work constantly; the seventh being kept ready against any sudden emergency. To attend to these, each Molino has three *Cebadores*, or feeders of metal, at four reals and a half *per diem;* and one *Arreador*, or mule-driver, at four reals *per diem*. He sits on the extreme end of the lever, and drives the animals, much as they are driven in the Cornish whims. They are, however, blindfolded. Each Molino has eighteen mules, of which three at a time are used and driven abreast at a trot, and these are changed every three hours. The Molinos work from 4 A.M. until 8 P.M., and each crushes on an average six *Montons* * of twenty quintals *per diem*. A Molino has nine *Mazos*, or stamps, of which the *Almadanetas*, or iron heads, each weigh one quintal. The length of the staff of each stamp is about nine feet four inches, and its size seven inches by four.

The heads descend on two long blocks of iron, (or copper when iron cannot easily be procured,) called

* The Monton varies in quantity in different parts of the country. At Real del Monte it is of thirty quintals; at Zacatecas, as above stated, twenty quintals.

Chapas. These and the heads generally last from ten to twelve months. The cost of the wood work of a Molino is about ..... 500*doll.*
The iron for 9 heads 9 quintals
2 chapas 9
18 at 30 doll. the quint.= 540
Making a total cost of .....1040*doll.*

The men who work at the Molinos never leave the walls of the Hacienda on any account, except on feast days, or Saturdays at night, and they return again to their work at 4 o'clock on the Monday morning. They are all very strictly searched before passing the outer doors.

From the Molinos, the dry Granza, or pounded ore, is carried to the

Tahonas, or Grinding Mills.

Of these there are seventy-four, which work during the same hours as the Molinos or Stamps, to which they are immediately adjacent; that is to say, from 4 A.M. to 8 P.M.: and the men who attend them are subject to the same confinement in the Hacienda, but return to it and commence working on the Sunday evening at 6 P.M. The *Tasas,* or Bowls of the Tahonas, are about nine feet in diameter by one foot in depth, and are smoothly paved with flat unhewn slabs of porphyry. The bowl

is also surrounded by a low, rough rim of the same material. The machinery of the Tahona is extremely simple, and merely a strong shaft moving on a spindle in a beam above it. It rests on a firm iron pivot beneath, which traverses in a small iron socket on the top of a post of hard wood, rising about a foot above the ground in the centre of the Tasa. This prop and the shaft are about six feet ten inches in total height between the beam and the base, and the shaft is crossed at right angles by two strong spars, which form four stout arms, each about five feet long. To the end of each of these is attached a large block of red porphyry, by lashings which are tied to two wooden pegs firmly driven into the upper side and extremity of the blocks, and then strongly secured at the same distances to the bar, so as to give a free scope to the stone, which is thus drawn evenly over the base by the action of the machine. The Granza, or dry crushed ore, is then mixed with a proper quantity of water, and the grinding is commenced. The four grinding stones are called *Metapiles*. Their average length is about two feet eight inches, and about eighteen inches square. They weigh about thirty arobas, and are delivered at the Hacienda at two dollars each. Notwithstanding the hardness and great size of these blocks, they become unserviceable from loss of weight in ten or twelve weeks; and the paving

of the Tasas is of about the same duration. Each Tahona has four mules attached to it, of which two work at a time harnessed to one of the horizontal arms lengthened to nine feet, so that each *Parada*, or relief, shall work eight hours; as thus:—from 4 to 6: 6 to noon: noon to 6: 6 to 8. In the course of which sixteen hours every Tahona is supposed to grind ten quintals of Granza into *Lama*. This last when considered by the *Macero* to be sufficiently reduced, is carried to the Patio or amalgamation floor, by the *Tahoneros* (men who attend the Tahonas) in a tub slung to a long pole.

Every two Tahonas have one man to attend them (a *Tahonero*), at four reals *per diem*.

The whole *Galera*, or shed under which the Tahonas work, is under the superintendence of one *Macero*, at from fifteen to twenty dollars a week; two *Ayudante Maceros*, at from eight to ten dollars a week; and a *Capitan de Galera*, at from six to eight dollars a week.

The cost of a Tahona, including the paving of the bowl and the four grinding stones, is on an average thirty dollars.

The *Patio*, or Amalgamation Floor.

This is a large flat space open to the sky, 312 feet in length by 236 in breadth, and securely surrounded

by strong walls. It is paved with large unhewn slabs of porphyry, and is capable of containing twenty-four *Tortas* (or flat circular collections of Lama, of about fifty feet diameter and seven inches deep when the Patio is not filled, but of somewhat smaller dimensions when nearly so) ranged in four rows and numbered from the left-hand corner *.

A *Torta* of Zacatecas contains sixty *Montons* of twenty quintals each, and is thus formed. In the first instance, a square space of the requisite size for the Torta is marked out and inclosed by a number of rough planks, which are propped in their places on the Patio floor by large stones; and dried horse dung and dust is piled round their edges, to prevent the escape of the Lama. A heap of *Saltierra* † is then piled in the centre, in the proportion on an average of two fanegas and a half to the Monton, = 150 for the Torta. After this, the Lama, in the quantity I have mentioned, is poured in. When the last or sixtieth Monton is delivered, the Saltierra is shovelled down and well mixed with the Lama by treading it by horses and turning it with shovels, after which

* At one end a small space is generally set apart for the assays, which are made on one *Monton* each; and at the other side are two small tanks, in which the men and horses wash their legs after treading out the Tortas.

† For this and other terms made use of see the Glossary at the end.

the preparation is left in quiet for the remainder of the day. This operation is called *Ensalmorar*, and the day of rest *Dia de Descanso*. On the day following comes *El Incorporo*. After about one hour's treading by horses, the *Magistral*, or roasted and pulverized copper ore, is mixed with the Lama (the repaso or treading still continuing), in summer in the proportion of fifteen cargas of twelve arobas to the Torta (if the ore is of six marcs per Monton), and in winter in only half the quantity; for it is a singular fact, that in summer the mixture cools and requires more warmth, while in winter it acquires of itself additional heat. With poorer ores,—as for instance those of four marcs to the Monton,—twelve cargas are applied in summer, and six in winter. From November to February *Cal* (or lime) is also occasionally used to cool the Lama, in the proportion of about a peck per Monton.

The *Repaso*, or treading out, is continued by six horses, which are guided by one man, who stands in the Lama and directs them by holding all their long halters. This operation is much more effectual in a morning than in the evening, and occupies about five or six hours. When the Magistral is well mixed, the *Azogue* (quicksilver) is applied, by being sprinkled through pieces of coarse cloth doubled up like a bag, so that it spurts out in very minute particles. The *Repaso Fuerte* (or a second treading of the horses) then follows; after

which the whole mixture is turned over by six men with wooden shovels, who perform the operation in an hour. The men are called *Repasadores;* and the turning the Torta, *Traspallar.* The Torta is then smoothed and left at Descanso for one entire day, to allow of the incorporation going forward. After every Repaso the legs of the men and horses are carefully washed in small tanks at one corner of the Patio. These are occasionally cleaned out, to collect any portions of amalgam which may have been deposited. The Torta undergoes the turning by shovels and treading by horses every other day, until the *Azoguero* (or amalgamator) ascertains that the *Azogue del incorporo* (or first admixture of quicksilver) is found to have been all taken up by the silver; and this he does by vanning or washing a small quantity of the Torta in a little bowl. A new supply is then added, which is called *el Cebo;* and when this is also found to have done its duty, the *Baño* (another addition of quicksilver) is applied, in order to catch any stray particles of silver which may yet remain; and on the same day, after a good Repaso, the Torta is removed on hand-barrows by the *Cargadores* (or labourers appointed to this service) to the *Tinas* or *Lavaderos,* in order that it may receive its final cleansing.

The general method of proportioning the quicksilver to the Tortas, is by allowing that every *Marco* of silver

which is promised by trial of the ores as the probable produce of a *Monton*, will require in the whole process 4lbs. A *Marco* is eight ounces.

In metals of five to six marcs and a half the Monton, (which was about the average richness of produce at Zacatecas,) 16lbs. of quicksilver is incorporated for every Monton, = 900lbs. the Torta. On the day of Cebo the proportion is 5lbs. the Monton, = 300lbs.; and when the Torta is ready to receive the Baño, it is applied at the rate of 7lbs. the Monton, = 420lbs.: making a total of 1620lbs. of quicksilver. With poorer metals,—of four marcs for instance,—the quicksilver is applied at the rate of 9lbs. the Monton for the Incorporo.. = 540lbs.

Cebo 3lbs.....	= 180
Baño 4lbs.....	= 240
Total	960lbs.

A smaller quantity of Magistral is also required in this case; as for instance, twelve cargas in summer and six in the winter. It should also be observed, that it is sometimes found necessary to add a second Cebo.

The usual time for the completion of the process of amalgamation is from twelve to fifteen days in the summer, and twenty to twenty-five days in the winter. This, it must be observed, is less than a third of the time occupied at some other mines, and than half the period required in some establishments which are even situated at

the same elevation and nearly under the same temperature. I attribute this circumstance in some degree to the method of amalgamation, but more so to the quantity beneficiated at a time in the large Tortas, which being spread out flat, receive the influence of the sun's rays throughout their thickness. In the generality of Mexican mines, only one Monton is mixed at a time; and the Lama is then piled in a small conical heap or Monton.

In summer the days of applying the Azogue are:—

El Incorporo, on the day following the Ensalmoran.

El Cebo, about the ninth day after the Incorporo.

El Baño, about the fifth day after the Cebo.

In winter, el Cebo takes place about the twelfth day after the Incorporo, and the Baño about the ninth day after the Cebo.

Tina or *Lavadero*, Washing Vat.

There are two of these under cover at this Hacienda; and in them the prepared Tortas are washed, in order that the earthy matters may pass off, and that the *Pella* (or amalgam) may deposit itself at the bottom. In depth these vats are about eight feet, and their diameter nine; they are well and firmly built of masonry, and the washing is thus performed:—A large horizontal wheel worked by mules gives impetus to a vertical one turning a

small horizontal wheel fitted round a perpendicular wooden shaft revolving on an iron pivot at the bottom of the Tina. To the lower extremity of this shaft are fitted four cross beams, from which long wooden teeth rise to the height of five feet; and their motion through the water is very rapid, and sufficient to keep all the lighter particles afloat, while the heavier ones sink beneath their influence. The larger wheel is worked by four mules, two at each extremity of a beam which crosses it. These animals are changed every four hours; and there are three Paradas (or twelve mules) to each Tina. The *Ariadores*, or drivers, receive each six reals *per diem*, and one is attached to each Tina. The washing water is supplied from two large tanks, on a somewhat higher level than the rim of the Tinas, and which are filled by a *Noria*, or water-engine, turned by two mules. Four belong to this machine, and the Paradas are changed at the same time with those of the Tahonas. One man attends them at their work, and receives four reals a day.

It requires twelve hours work of one Tina to wash a Torta properly. This operation is performed under the particular superintendence of a *Guarda Tina*, at fifteen dollars a week. Eight *Cargadores* (porters or labourers expressly appointed to the duty) are employed in carrying the prepared Lama of the Torta in hand-

barrows to the Tinas, and are paid according to the distance of the Torta which is to be washed. Their wages differ therefore from one real to one and a half a man for each Torta. When the washing is completed, one dollar is given amongst the cargadores for each Tina they are to clear; and nine reals are also paid between them for the re-washing of the earth cleared from the Tina in emptying it of the amalgam. Thus four dollars two reals are distributed on every washing day. The re-washing of the earth is performed under proper inspection in a tank in the Lavaderia, by means of large wooden bowls, which are most dextrously managed by the Cargadores. Old women called *Apuranderas* then carry off the refuse earth, which they wash again; and they are paid at the rate of one real the ounce, or two dollars the pound, for the *Pellita* or *Pella* (amalgam) which they can procure from it. The whole operation of washing is strictly watched by the *Guarda Tinas*, the *Azoguero*, and the *Dependientes*, or clerks of the establishment; and the Cargadores who have been employed in the process are very carefully examined upon leaving the place, to see that they have secreted no Pella about their persons.

Notwithstanding the attention which is paid to the washing process, a portion of the amalgam is unavoidably carried off by the stream of water and earthy mat-

ters; and this deposits itself with part of the Magistral in the channels for the washing water, which are accordingly often cleared out. This deposit called *Marmaja* is brought to be washed again in the tank in the Lavaderia, after which it is delivered over to the Apuranderas, to receive its final cleaning.

The amalgam, which from the application of the third portion of quicksilver called the Baño is in a very liquid state, is carefully carried in bowls into the

Azogueria,

where the process of straining the active or uncombined quicksilver from the amalgam is performed. The name of "Azogue" still continues to be applied to the amalgam until all the uncombined quicksilver is drained from it, which is performed, after it has been carefully weighed, by pouring it into a large long bag suspended by strong hide ropes from a cross-beam over a kind of vat of masonry smoothly plastered within, and capable of containing about two hogsheads. This bag, called *Manga*, has its upper part of strong well sewed leather, and the lower or pointed end of a thick kind of canvass very closely woven. Through this the uncombined quicksilver very speedily finds its way; and as it filters off, the mass begins to harden in the bag, until at length it acquires sufficient consistency to bear being

formed in moulds; when it is taken out and weighed again, so as to ascertain the quantity of quicksilver which has drained from it. The amalgam is then beaten down into a wedge-shaped mould. The portion thus moulded is called *Marqueta*, and weighs 30lbs. Three of these wedges are ranged side-by-side on a small stool, and when all are ready they are carried into the

Quemadero, or Burning-House.

In the first place the Marquetas, to the number of eleven, are arranged in a close circle on a solid copper stand called *Baso*, having a round hole in the centre. This layer is called a *Cuerpo;*—others then follow until the number of wedges are all disposed of, and the pile is called *Piña*. The "Cuerpos" are squeezed tightly together by a rope being drawn round them; and such is the tenacity of the amalgam, that it does not break. The Baso, previous to the formation of the Piña, is placed over a pipe leading to a small tank of water into which the quicksilver trickles during the process; and from the peculiar formation of the Marquetas a continuous hole, of the same size as that in the Baso, is left in the centre of the Piña, for the free passage of the quicksilver, as it is forced from the amalgam by heat. A large bell-shaped copper cover called *Capellina* is now hoisted up, and carefully lowered over the Piña by

means of pulleys; and a strong luting of ashes, saltierra, and lama, is applied to its lower edge, and made to fit very closely to the plate on which stands the Baso. A wall of fire-bricks is then built loosely round the Capellina; and charcoal in the proportion of three *Capas* (the inclosed space filled thrice) for each Cuerpo being supplied, from time to time it continues burning all night.

During this process the quicksilver trickles down into a Pileta or little tank of water, from whence it is afterwards, when quite cool, collected and weighed, in order that the quantity lost in the burning may be correctly ascertained. On the following morning, (usually Saturday,) after about twenty hours burning, the bricks and ashes are removed, the luting broken, and the Capellina hoisted up. The *Plata Quemada* (burnt silver) is then found in a hard mass, which is broken as nearly as possible into its first shape by the Partidor de Plata, with a wedge and sledge-hammer. It is then again weighed; and being put into leathern bags, in the quantity of 674lbs. or 135 marcs to each, is carried to the

Casa de Fundicion (Casting-House),

where it is made into bars by a very simple process. This place contains a common pair of furnace-bellows, the nozzle of which projects through a wall; and op-

posite this is placed an iron cage called *El Craz*, which stands over a small machine (Jantilla), named I believe, in England, a double-handed ladle, into which the metal falls in melting. A portion of the Plata Quemada, viz. the contents of one of the leathern sacks, or 135 marcs, with a quantity of charcoal, is piled in the ladle; and being exposed to the blast from the bellows, in about twenty-three minutes melts down into the receptacle below, whence it is poured into a stone or iron mould called "Ladrillera," (well lined with a preparation of fine clay,) in which it is formed into bars in the form of a pig of lead, seventeen inches long, by six wide and two and a half deep, termed *Barra de Plata*. Each of these weighs as nearly as possible, 135 *Marcos*, of 8 ounces, = 1080 ounces. The loss in burning is averaged at about 5 ounces to each Barra, and the *total loss of quicksilver* in the whole process, comprehending *Patio*, *Tina*, *Quemadero* and *Fundicion*, is at about the following rates:

With good metals (that is to say above six marcs), it loses two and a half to three per cent. With coarser metals eight to nine per cent:—and the average loss at our Hacienda was from seven to eight per cent.

The bars are sent to the Veta on the Saturday; on the following Monday they are carried to the Mint (*Casa de Moneda*) in Zacatecas; and on the ensuing Friday their amount in dollars is received.

The expenses of the coinage are (for Veta Grande alone, other mines paying twenty reals) as follows:

Twelve reals for each hundred marcs Fundicion and essay.

Three per cent *ad valorem* the silver.

Two reals each marc for coinage.

There is also a further impost of one and a half per cent, under the head of Direcho di Mineria.

Magistral (Copper Ore roasted and finely pulverized) is of two kinds; the *Abronzado* or *Negro*, which is a very rich gray ore; and the *Cobriso*, of an inferior quality.

The first is purchased at from five to five dollars and á half the carga, of twelve arobas, and delivered at the Hacienda. The latter costs fifteen to twenty reales the carga. It is procured from the copper mines of *Tepisala*, at the *Asientos del Ybarra*, twenty leagues to the southward of Zacatecas; in which district are also some silver mines. At these works the copper is also smelted in great quantities.

The first process through which the ore is put at the Hacienda, is to reduce it by breaking (*granzear*), to a fine powder between two large stones, for which is paid one real and a half for every carga crushed in this very laborious manner. This Granza is then ground to a paste in a Tahona, after which it is spread out to

dry on the ground; and having been well beaten, to break any lumps which may have formed, it is mixed with some of the Magistral from the washings of the Marmaja. The best ore, (abronzado,) requires an admixture of one-third of this. The inferior is mixed with one-half. In this state it is put into furnaces, which each takes two cargas. Seven of these are constantly at work, fed by the wood of the Yucca-tree. Each furnace expends two Carreta (cart) loads a week, and these on an average are at three dollars the load.

To attend to the preparation of the Magistral there is a *Quemadero* (or burner), at five dollars a week; and one *Peon* (labourer) to each furnace, at four reals the day.

Sal Blanca. Saltierra. (White salt. Salt earth.)

The Sal Blanca and Saltierra are muriate of soda, which is procured as an efflorescence from low salt marshes in various parts of Mexico. That from which this Hacienda is supplied is at a place called *Salinas* (Peñon Blanco of Humboldt), three days journey for carretas, and lying about thirty leagues to the eastward of Veta Grande. It is the property of Government, and yields a great revenue, now that the mines are again in activity. The price of the Sal Blanca is from three to three and a half dollars the Fanega (five Fanegas are equal to eight bushels); and the *Fleyte* (or carriage,)

three to four reals. The Saltierra, which is so intimately blended with a light clayey earth that its nature can only be ascertained by the taste, is much cheaper, and is on an average procured at seven reals the Fanega: four of which are for the purchase, and three for the conveyance in two-wheeled cars or waggons, drawn by eight bullocks each.

The payment from the Hacienda to the Salinas is not expected before the expiration of one year after the delivery of the salt.

The quantity generally used is two fanegas and a half to the Monton: but in cases where saltierra is not at hand or sufficiently abundant, one fanega of Saltierra and an *Almud* and a half of Sal Blanca may be used for each Monton. An *Almud* is the twelfth part of a fanega.

Experiments on temperature of Tortas, at Sauceda.

Air 68° in the shade: day gloomy at 7 A.M.

A Torta about to be washed; the whole process having been completed was at 63°.

A Torta eight days beneficio, 63°: several others the same.

A heap of dry Magistral 80°; a handful wetted 114°.

A heap of dry Marmaja 76°; a handful wetted 80°.

Saltierra dry 63°; water in a tank 65°.

A Torta immediately after the admixture of Magistral by Repaso Fuerte, only increased its temperature from 63° to 64°·5.

An exact statement of the cost of beneficiating one Monton of metal, supposing its "ley" to be six marcs, allowing one pound and a half of quicksilver as its loss for each pound, which is the utmost that should be *expended* in the whole quantity.

	dol.	*real.*
For crushing by stamp six cargas eight arobas = 2000lbs. English, at one real and a half per carga	1	2
For grinding to paste, including the cost of Tahonas, mules, Tahoneros, and Metapiles (or grinding-stones) each in proportion to its daily expense or waste	1	5
For two fanegas and a half of Saltierra, at seven reals	2	1½
For three arobas of Magistral, at the rate of four dollars the carga	1	0
For ten Repasos, at one real each	1	2
For washing a Monton	0	3
For burning the silver	0	2
Expenses of the people who work and attend the process	1	0
For 4lb. 8oz. of quicksilver consumed and expended or lost, at the rate of six reals the pound	3	3
Total	12	2½

As the ores increase in richness the expenditure is greater, in the proportion of eight ounces of quicksilver for every marc of increased value. Thus ores of twenty-six marcs to the Monton, would cost seven dollars and a half more ; = 10lbs. of quicksilver.

Appendix III.

GLOSSARY.

Abronzado. Yellow copper ore (sulphuret of copper) which is burnt for magistral.

Administrador. The principal superintendant, who has charge and responsibility of the whole establishment, ore, and distribution of money, &c.

Albañil. The bricklayer or mason.

Almadanetas. Iron stamp-heads.

Almud. The twelfth part of a fanega.

Apuradores. Men who re-wash the earth from the tinas.

Apuranderas. Old women who re-wash the ore after it has been washed in the tinas.

Arnero. A slope covered with leather perforated with small holes, over which the crushed ore is made to slide, and allowing the portions which are sufficiently small to run through into the holes below.

Aroba. Twenty-five pounds weight.

Arrayador. } A driver; he who drives the mules in the
Arréador. } malacates or stamps.

Arrieros. Muleteers.

Asogue. Quicksilver. This name is also applied, but

improperly, to metals capable of being amalgamated.

Asoguería. The room set apart for separating the amalgam from the active quicksilver, for weighing the "Pella," and forming it into "Cuerpos."

Atisador. The dresser of magistral.

Ayudante Azoguero. Assistant to the azoguero.

Azoguero. The amalgamator. This is an office of considerable importance, much experience being required in conducting the process.

Banguillos. Stools on which the marquetas are placed.

Baño. The last portion of quicksilver applied to a torta, literally as a bath to overflow the amalgam and collect it all, that none escapes.

Baril. A cask; those used to carry lama are slung to a pole.

Barra. A bar. A term used in the division of profits or property in a mine, which it is the custom to consider as divided into twenty-four bars or shares. Thus a proprietor of the half-share of a mine is said to hold twelve barras of it.

Barra de Plata. A bar of silver is 135 marcs, or 1080oz.

Barratero. The working miner.

Batéa apuradera. Bowl used in the re-washings.

Baxo. The lower part; the term is applied to the base on which the phatillo rests.

Bota. Large skin bag in which the water is drawn from the mine.

Brazuelos. Cogs of the master-wheel.

Burráda. A jackass.

Cadena de la Naria. Chain for the buckets of the wheel which draws water from the well.

Cajon de Granza. The name of the pit to receive the crushed ore.

Cajonero. One who receives the manta or bota at the shaft's mouth.

Canal. The water spout for "Tina."

Candellero. A socket deeper than the chumacera, and used for the same purpose. (See *Chumacera.*)

Capellina. A large bell-shaped hood of copper beneath which the amalgam is burnt for the purpose of extracting the quicksilver by distillation.

Capitan de Galera. The person in charge of the sheds under which the tahonas are worked.

Capitan del Patio. Chief ore dresser who has charge of the amalgamation floor, and sees that it is cleaned and in order at the close of each day's work.

Caporal. Chief stable-man.

Carcamo. The drain which carries off the earthy matter from the tinas when washing the amal-

gam. This is frequently cleared out and washed for quicksilver.

Carga. Twelve arobas, = 300lbs.

Cargador. One whose duty consists in carrying the amalgam to the tinas and in cleaning them out.

Carena. An upright stanchion for supporting machinery.

Castillo. The frame of the stamping machine.

Cebo. The second addition of quicksilver to the "Torta."

Chapas. Iron blocks on which the stamps fall.

Chumacéra. An iron socket for the spindles of shafts. (See *Candelero.*)

Cobriso. An inferior kind of copper ore: sometimes the term is applied to iron pyrites.

Colero. Assistant of the under-ground captain in charge of the péonada or account of daily labour.

Contra Cajonero. He who carries away the stuff sent up the shaft. (See *Cajonero.*)

Corraleros. Stable-men.

Correa. The person in charge of the corral or stables.

Cras. An iron cage or frame into which with a quantity of charcoal the burnt silver is put for its final process of melting; from the cras it falls into the Jantilla;—which see.

Criba. Perforated leather through which the stamped

ore falls when sufficiently fine into a pit beneath.

Cruces. The cross pieces of the grinding mills.

Cubo. A leather or other bucket.

Cuchara de Cuerno. A small horn bowl in which the earth of the tortas is washed, in order to ascertain from time to time the progress of the amalgamation.

Cuerpo. Is the wedge-shaped mass of hard amalgam formed in a mould preparatory to burning. A number of tiers of cuerpos form a piña.

Dependientes. A name applied to the inferior officers and clerks of the establishment.

Descanso, dia de. The day on which the tortas are left at rest.

Destajero. A labourer working by the piece. In mines the term is applied to the working miner employed on tut work.

Dientes. The cogs on a large wheel which receive those of the smaller.

Ege. The axis of a wheel.

Ensalmorar. The act of mixing the saltierra with the lama :—the first process in amalgamation.

Espeque. The cross lever of the noria or tahona, to which the mules are harnessed.

Fanega. A measure of capacity, equal to 1·599 En-

glish bushel. Five fanegas are therefore very nearly equal to eight bushels.

Fuelles. The bellows used in the fundicion, &c.

Fundicion. The process of melting the burned silver into bars.

Galera. A shed.

Granza. The crushed dry ore as it comes from the stamps.

Greta. Litharge.

Gualdra. The large cross beam in which the upper spindles of the shafts of machinery traverse.

Guarda Tinas. He who superintends the washing of the amalgam in the vats or tinas.

Guarda Tiro. A man who takes account of the stuff brought up the shaft where he is stationed.

Guijo. The iron spindle of the shaft of machinery.

Hornos de Magistral. Roasting stoves for copper ore.

Incorporo. The first mixing of the quicksilver with the lama.

Jantilla. A double handed ladle into which the melted silver falls from the cras.

Ladrillera. An iron or stone mould in which the melted silver is poured in order to form the barra.

Lama. Ore ground into a fine paste by the tahonas.

Lamero. The lama when merely thickened by admixture with saltierra.

Lavaderos. Amalgam-washers.

Lentermillas. Large vertical wheels of the stamping apparatus.

Macero. He who has the charge and direction of crushing and grinding the ore in the tahonas previous to amalgamation.

Magistral. An ore of sulphuret of copper mixed with iron, which is roasted and pulverized, and mixed with the lama to decompose the ores of silver in the process of amalgamation.

Magistraleros. Men who burn the copper ore.

Mandadero. Daily messenger.

Manta. The leather bag in which the ore is sent up the shaft.

Mantero. One who carries away rubbish and clearings in the levels below.

Marmaja. The deposit, chiefly of metallic matters collected from the washings of the torta in separating the amalgam. It is burnt, and the copper and iron pyrites are again used in certain proportions with fresh magistral.

Masos. Stamping staves, to which the almadanetas are fixed.

Mayordomo. Chief of the arrieros.

Metapiles. Grindstones used in the tahonas.

Minero. Under-ground captain.

Minero Mayor. Chief miner.

Molineros. Men employed in crushing ore with the stamps or molinos.

Molinete. Shaft of tina.

Molino. The stamping or crushing machine.

Mulero. Chief muleteer.

Noria. Machine for raising water.

Pala. Spade of wood.

Palero. Timber-man; from *Palo* (wood).

Palero Mayor. Chief timber-man.

Parada. A relief or change of men, mules, or horses.

Parihuela. Hand-barrow.

Patio. The amalgamation-floor.

Péon. Labourer.

Peon. Shaft of horizontal grand wheel.

Pepena. Picked ore.

Pico. Sledge-hammer for breaking piña.

Piña. (See *Cuerpo.*)

Platillo. Small cog-wheel.

Polvorero. Powder-man.

Portero. Porter at the gate.

Quebrador. Ore-breaker.

Quemador. The burner and director of magistral.

Quintal. One hundred pounds weight.

Ramplones. Uprights.

Rayador. Grass captain, or accountant.

Reatas. Cords used for lashings.

Repasadores. Men who turn over the tortas or drive the horses in the repaso.

Rescate. Purchase of ore.

Rescatador. Purchaser of ore.

Sahuan. The door of entrance.

Sal Blanca. Salt, or muriate of soda.

Saltierra. Salt mixed with earthy impurities. (See vol. i. page 195.)

Tahona. The grinding mill for the granza or crushed ore.

Tahoneros. Men who attend the grinding of the ore in the tahonas.

Tajadera. Wedge to break the tina.

Tajamanil. Thin wooden shingles for roofing.

Tasas. The bowls of the tahonas.

Tequesquite. Carbonate of soda.

Tina. The vat in which the amalgamated ores are washed to obtain the amalgam.

Triangulo. The cogs of the stamps.

Valiente. A substitute.

Velador. A watchman.

Zorra. A lad who attends the chief miner under ground.

THE END.

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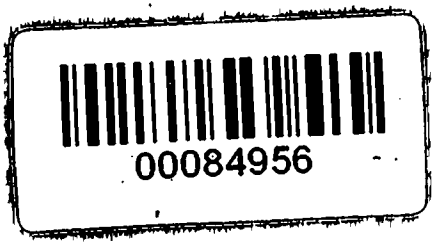
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